

VOL. 72

NO. 12

# textile bulletin

AUGUST • 15 • 1947

*Miss Henry*

An interesting study by the Cotton Mills Information Service, "History Of Cotton Textile Manufacturing In The United States—1787 To 1947," will be found on Pages 23, 24 and 27.

Precision Ball Bearing Lap Pins give you better, evenier laps and increase your production because they eliminate picker stoppages which are ordinarily due to clogged loggerheads. Picker lap will be perfectly square on both ends—no more convex or concave lap ends. The lap will unwind perfectly on cards, without splitting.

Precision Ball Bearing Lap Pins are economical. There is nothing to wear out, nothing to clog, so they outwear many old style lap pins and give better, increased, and trouble free service all of the time.

**BETTER  
LAPS  
ASSURED**

**WITH  
PRECISION  
Ball-Bearing  
LAP PIN!**



1—Revolves freely on four Lifetime Sealed Ball Bearings which cannot clog with lint and never need lubrication. 2—Journal remains stationary. 3—Rolls in loggerhead remain stationary or may be replaced by block of wood. 4—Ends of the pin are provided with electronically induction hardened steel caps, preventing marring of pin end. 5—Outside of pin is PRECISION taper ground to a smooth finish, making for easy removal from lap.

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**PRECISION Gear and  
Machine Company, Inc.**

**Patent Applied For  
WRITE OR WIRE for  
Full Information**



ADVERTISING  
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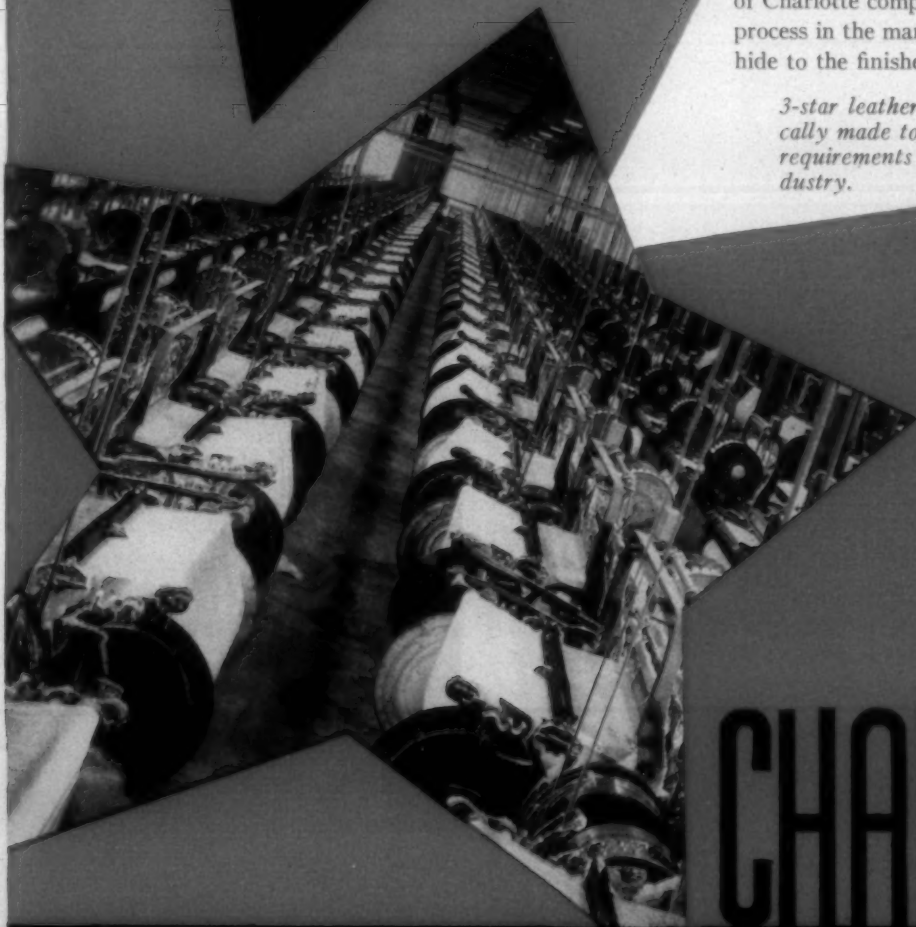


Let  
**3**  
**STAR**  
**LEATHER**  
**BELTING**  
*do its very special  
job in YOUR plant-NOW*

Why deprive your plant of the exclusive features 3-star belting embodies, features that are not just something to talk about, but are inherent characteristics of service purposely built in. A

3-star belt gives you unusually high tensile strength, positive pulley grip, and minimum stretch—all results of Charlotte complete control over every process in the manufacture from the raw hide to the finished belt.

*3-star leather belting is specifically made to meet the peculiar requirements of the textile industry.*



**CHARLOTTE**

**LEATHER BELTING CO.**

CHARLOTTE, NORTH CAROLINA



*Presenting...*

**ANOTHER IMPROVEMENT IN  
U S SHUTTLES FOR  
WOOLENS • WORSTEDS • BLENDS**

**Interchangeable die-cast brass eye  
permits five-minute changeover  
—reduces shuttle inventory**

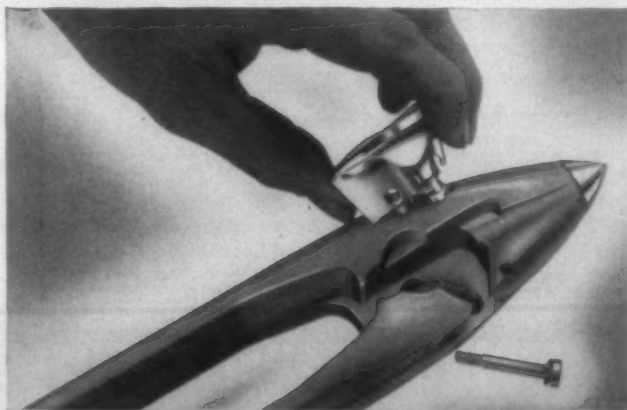
This improved U S Shuttle can be quickly adapted for weaving woolen, worsted, or blends by simply changing the shuttle eye — a five minute job that requires no special skill. The same standard shuttle can be equipped with a plain eye for woolens, Jackson Tension eye for worsteds, or a reverse eye for lefthand twist. Accurately dimensioned, each eye seats to a true fit without fussy adjustments. The same eyes can be used in any length shuttle.

This advanced feature lowers weave room costs by permitting full production with a limited number of shuttles. It also simplifies and speeds up normal maintenance.

Mill-tested under the most severe conditions, this new shuttle will materially increase the efficiency of your weaving operations — yet it costs no more. Be sure to see it before you place your next shuttle order. A U S representative will be glad to demonstrate its advantages.

**AVAILABLE FOR PROMPT DELIVERY**

**DIE CAST BRASS EYE**, formed to meet tolerances of .004 to .005 inch, permits complete interchangeability. Shuttle above is fitted for worsted or blend weaving, with eye equipped with Jackson Pad Tension Device.



**IN LESS THAN 5 MINUTES**, by removing one screw, lifting out worsted eye and inserting plain eye, shuttle is converted for weaving woolens.

**U S**

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Bevel Edge

**Bronze  
Travelers  
for  
WET  
TWISTING**



Bevel Edge

U. S. Ring Travelers are made in every style and size for wet twisting on vertical rings. We supply all standard types. In addition, we make the exclusive Bevel-edge design, which we strongly recommend for certain kinds of work.

*A Style and Size for  
Every Textile Fibre*

"U. S." offers a COMPLETE Traveler Service—a complete line suited to every fibre and operation—complete engineering service assisting you in traveler selection and maintenance for maximum spinning and twisting production.



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*Potato Starch*

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**MAGIC VALLEY  
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**ST. ANTHONY  
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OF IDAHO

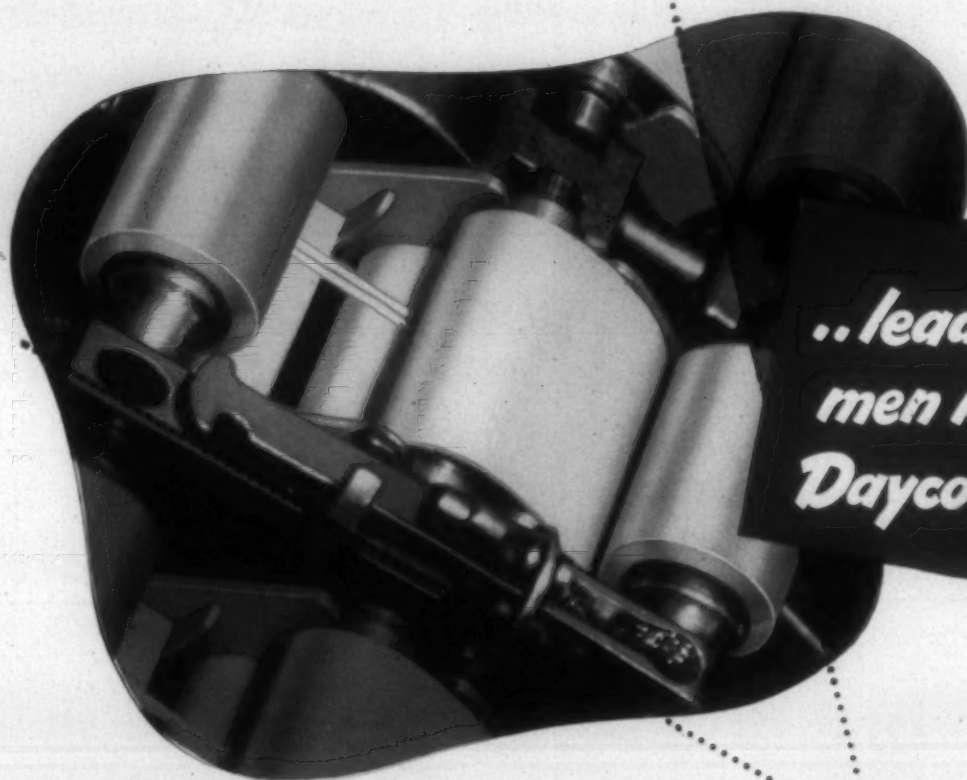
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OF IDAHO

DISTRIBUTED BY  
**AMERICAN KEY PRODUCTS, INC.**  
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**"Dayco aprons show no signs of deterioration such as cracking, splitting, distortion or grooving"**



***..leading mill men insist on Dayco Aprons***

Spinning room overseers, throughout the textile industry, are insisting more and more that every frame in their spinning rooms be equipped with Dayco Long Draft Aprons. That's because Daycos last longer, require less attention than other type aprons. Daycos are nondirectional . . . can be put on either way. Important too, is their nonstretch feature that keeps them on the frame when you start up. Because the thickness of Dayco aprons is rigidly controlled to 1/1000's, plus or minus, yarn uniformity is increased as much as 10%, or more. Furthermore, Daycos retain their original drafting qualities for many, many months of trouble-free service.

If you aren't using Daycos, it will pay you to put a few to work on your frames now. Write for additional information, or have one of our textile product engineers call on you. He can show you many additional ways to more economical production and better quality yarn.

**TEXTILE PRODUCTS DIVISION • DAYTON RUBBER**

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- Won't curl
- Unaffected by hard ends

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**TEXTILE MANUFACTURERS**

IN HENLEY paper service there is real background knowledge of textile industry requirements—41 years closely working with textile manufacturers.

And by recent and current surveys, HENLEY maintains that close touch. Our own sources are selected, and our purchases are guided by demands we know will arise.

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*John: Why not let  
 the Penick & Ford  
 Textile Laboratory  
 in Atlanta check  
 specifications on  
 that cloth?  
 Jim*

**WENTWORTH**  
Double Duty Travelers  
 Reg. U. S. Pat. Off.

HICKS — AMERICAN — WILSON — U. S. STANDARD

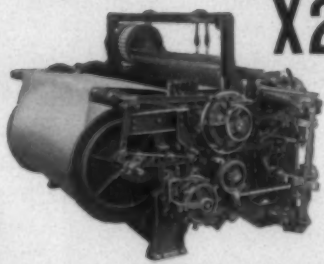
Last Longer, Make Stronger Yarn,  
 Run Clear, preserve the SPINNING  
 RING. The greatest improvement  
 entering the spinning room since the  
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 A NEW CHEMICAL TREATMENT

Manufactured only by the  
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# **SUPER HIGH SPEED X2 MODEL LOOM**



**GIVES YOU  
PEAK  
PRODUCTION**

**Retaining Leadership Through Research**

**DRAPEZ CORPORATION**



# HOW TO ADD LIFE TO YOUR CARD CLOTHING



## Use The Right Stripping Brush Regularly!

Impacted waste, hulls and other foreign matter that the vacuum stripper does not reach can best be removed by the stripping brush. Weekly use of the right stripping brush is not only necessary for good carding but will help you get the maximum life from your card clothing.

To achieve best possible results, it is important that you select the proper type brush. Our service representative will be glad to help you in this selection. He can show you how and why the brush he recommends is best for your needs.

The cost of stripping brushes is negligible, and they should be replaced often. A brush in poor condition frequently causes selvages full of neps, shiners (wire knocked forward), and loose fillets.

Call in your Ashworth service representative for expert advice in stripping brush selection. Then use the right brush regularly.

**ASHWORTH BROS., INC.**  
AMERICAN CARD CLOTHING CO. (Woolen Div.)

Fall River\*†† Worcester\*† Philadelphia\*†† Atlanta††  
Greenville†† Charlotte †† Dallas†† (Textile Sply. Co.)  
\*Factory †Repair Shop ††Distributing Point

**PRODUCTS AND SERVICES** — CARD CLOTHING FOR COTTON, WOOL, WORSTED, SILK, RAYON AND ASBESTOS CARDS AND FOR ALL TYPES OF MAPPING MACHINERY • BRUSHER CLOTHING AND CARD CLOTHING FOR SPECIAL PURPOSES • LICKERIN WIRE AND GARNET WIRE • SOLE DISTRIBUTORS FOR PLATT'S METALLIC WIRE • LICKERINS AND TOP FLATS RECLOTHED.



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THE FINEST QUALITY*

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Ammonium Chloride  
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## VOGEL No. 14 SOUTHERN OUTFIT

**A durable, economical closet  
for Mills, Factories and all  
types of industrial installation**



The Vogel No. 14 has a vitreous china top supply bowl, heavy flush valve, reinforced hard-wood seat, painted white enameled drum shaped tank and union ell flush connection.

*(The Number 14  
is not frost-proof)*

When installing No. 14 closet trap must be set directly under bowl.

**Joseph A. Vogel  
Company**

Wilmington 99 • Delaware

**VOGEL PATENTED PRODUCTS**



AN EXCELLENT  
DYE LEVELLING  
AGENT

A SUPERIOR  
PENETRANT IN  
PACKAGE DYEING

# DUOFOL-L

**A SULFATED  
CONDENSATION  
PRODUCT**

RENDERS  
THE FABRIC  
HIGHLY ABSORBENT

AN  
OUTSTANDING  
WETTING AGENT

Hartex Duofol L, a sulfated condensation product, is a clear amber oil possessing superior wetting, rewetting, and softening properties. It is clearly miscible with water in all proportions and retains its high surface activity in the presence of hard water, salt, alkali, or weak acids.

Duofol L was developed for instantaneous wetting in baths at all temperatures up to the boil.

It is recommended for dyeing operations in general and specifically for vat and package dyeing to give greater uniformity of shade.

When a solution of Duofol L is dried into a fabric, it renders the fabric highly absorb-

ent (rewetting property). In addition, Duofol L acts as a softening agent making its use doubly advisable in sanforizing operations.

Quantities as low as 4 oz. per 100 gallons have proved satisfactory for most applications.

**HART PRODUCTS CORPORATION**  
1440 Broadway, New York, N. Y.

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Rayon Oils & Sizes	Delustrants
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Synthetic Detergents	Wetting-Out Agents
Conditioning Agents	Weighting Agents
Scrooping Agents	Mercerizing Penetrants
Splashproof Compounds	

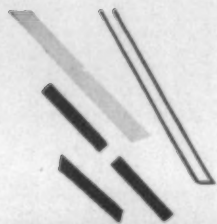
Send for free booklet, "Mercerizing and ALKAMERCE—The Ideal Dry Mercerizing Penetrant"



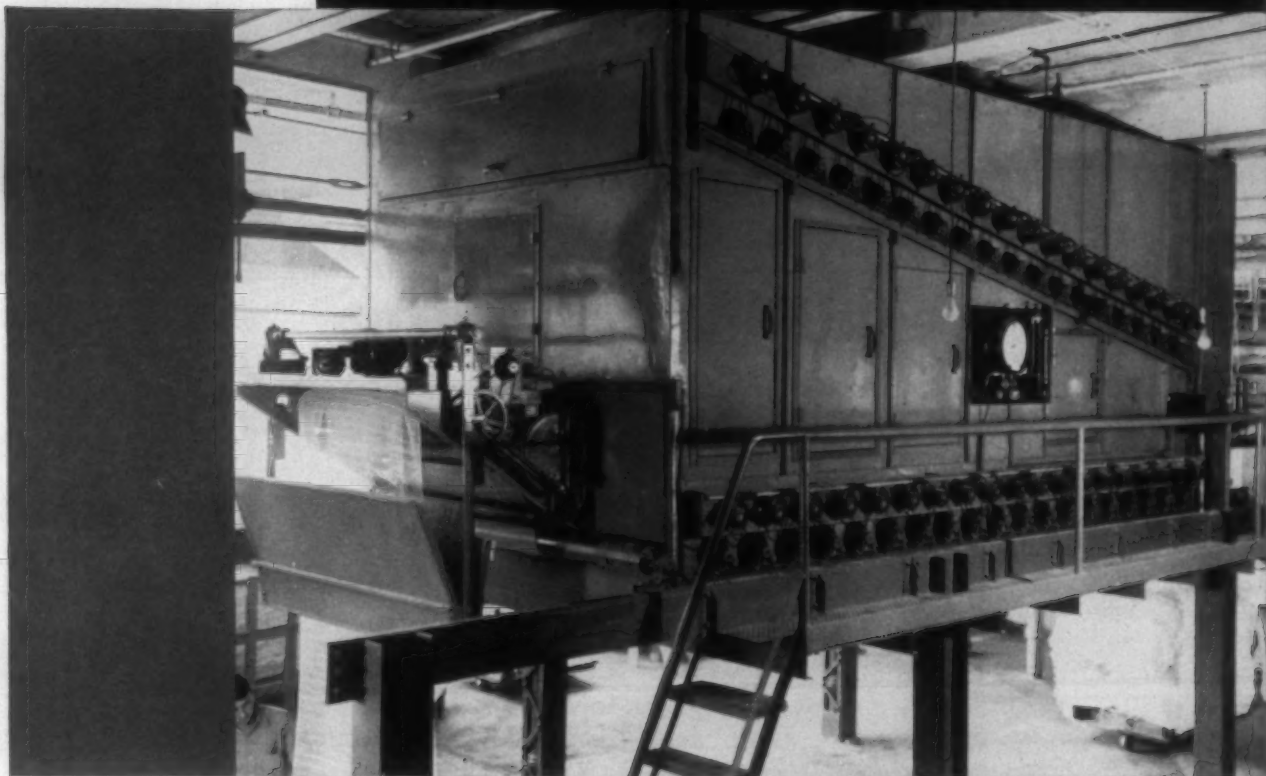
# Hart

*based on research*

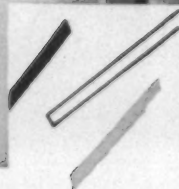




## *Engineered* FOR CURING RESIN TREATED FABRICS



## PROCTOR *Roller* CURER



The Proctor roller curer, illustrated, is in daily use in curing curtain material, an application to which this machine is ideally suited.

The material to be cured is conveyed through the curing chambers by means of individually motor driven rolls. This method of conveying is especially effective in the handling of light materials, such as marquisette. It holds the goods taut without tension, for the speed of the rolls varies with even the merest suggestion of tension. The material is carried through the machine at high speeds and subjected to temperatures of about 350°F. The heating medium in this machine is gas, although the same high temperatures can be obtained with high pressure steam. Individual analysis of cost and

other factors involved make it possible to determine which of these two heating mediums is most advisable in any particular case.

In the particular installation shown, the curer is "suspended" from the ceiling—or elevated from the floor, in such a way as to provide working space beneath. Such an arrangement is ideal where floor space is at a premium, and is another example of how Proctor equipment is individually designed to meet specific plant requirements.

If you are engaged in the production of resin treated fabrics, you should investigate this and other Proctor equipment that may help you to a more efficient curing job and less cost. Write for details today.

PHILADELPHIA 20, PA.

**PROCTOR & SCHWARTZ**  
I N C





Ensemble by Norris-Conti

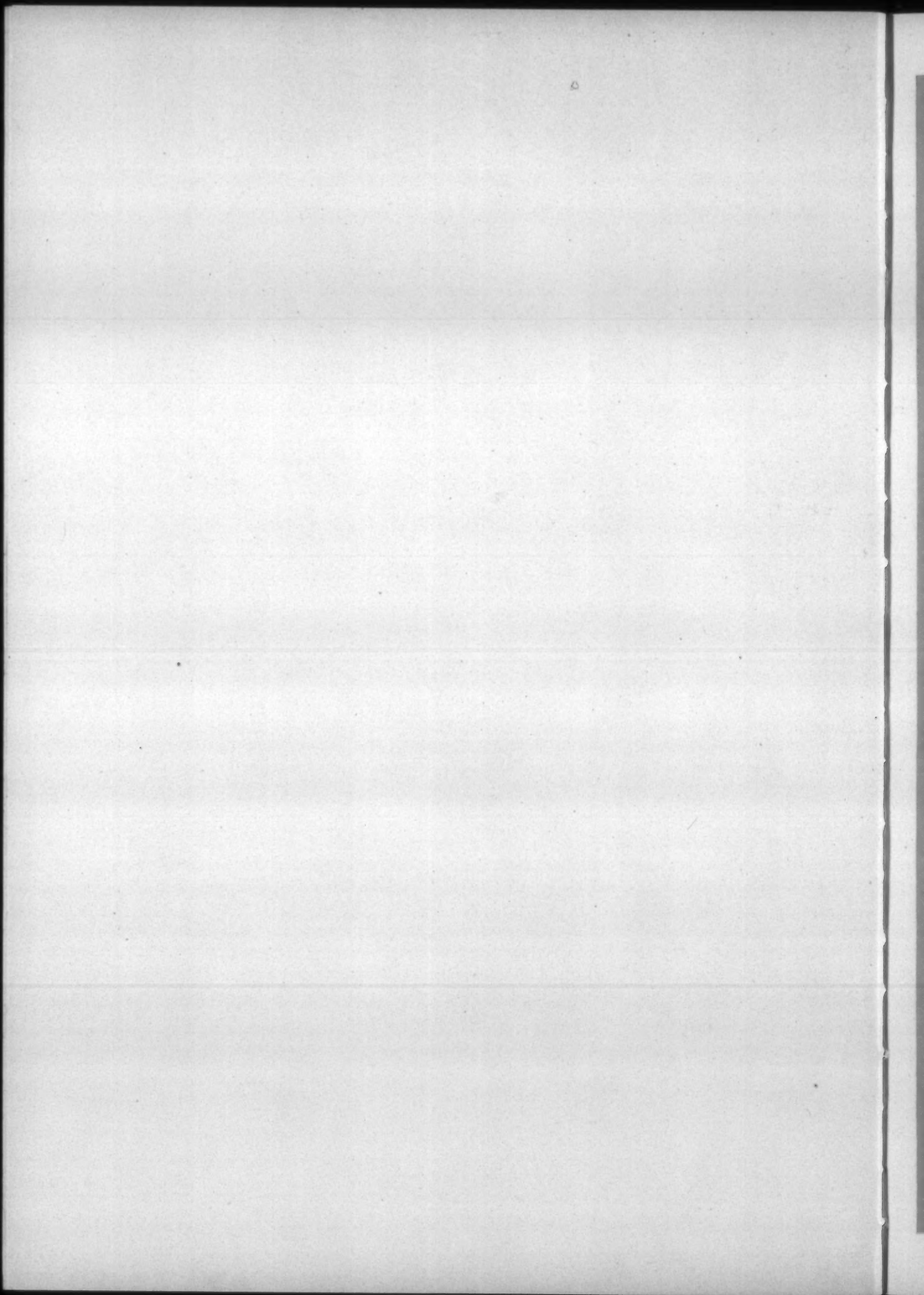
*Dyes for coatings, suitings and custom shoe leathers, of course!  
But what of rouge, lipstick, face powder and nail enamel?*

*Whatever you wear, use or see it's likely to be colored with  
National Aniline dyes. For National alone makes every  
class of aniline dye and color...has had longer and broader  
application experience than any other American producer.*

*Specify National Aniline Technical Service and Dyes  
for assured results.*

WHEREVER COLOR IS USED  
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DIVISION OF  
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Moves and stacks anything up to 2000 lbs.  
Pulls down handling costs as much as 20% to  
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models, 4000 to 30,000 pound capacities, all  
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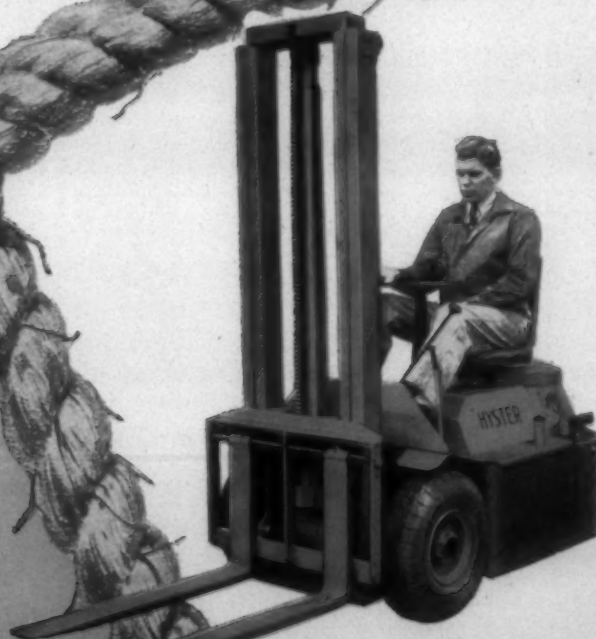
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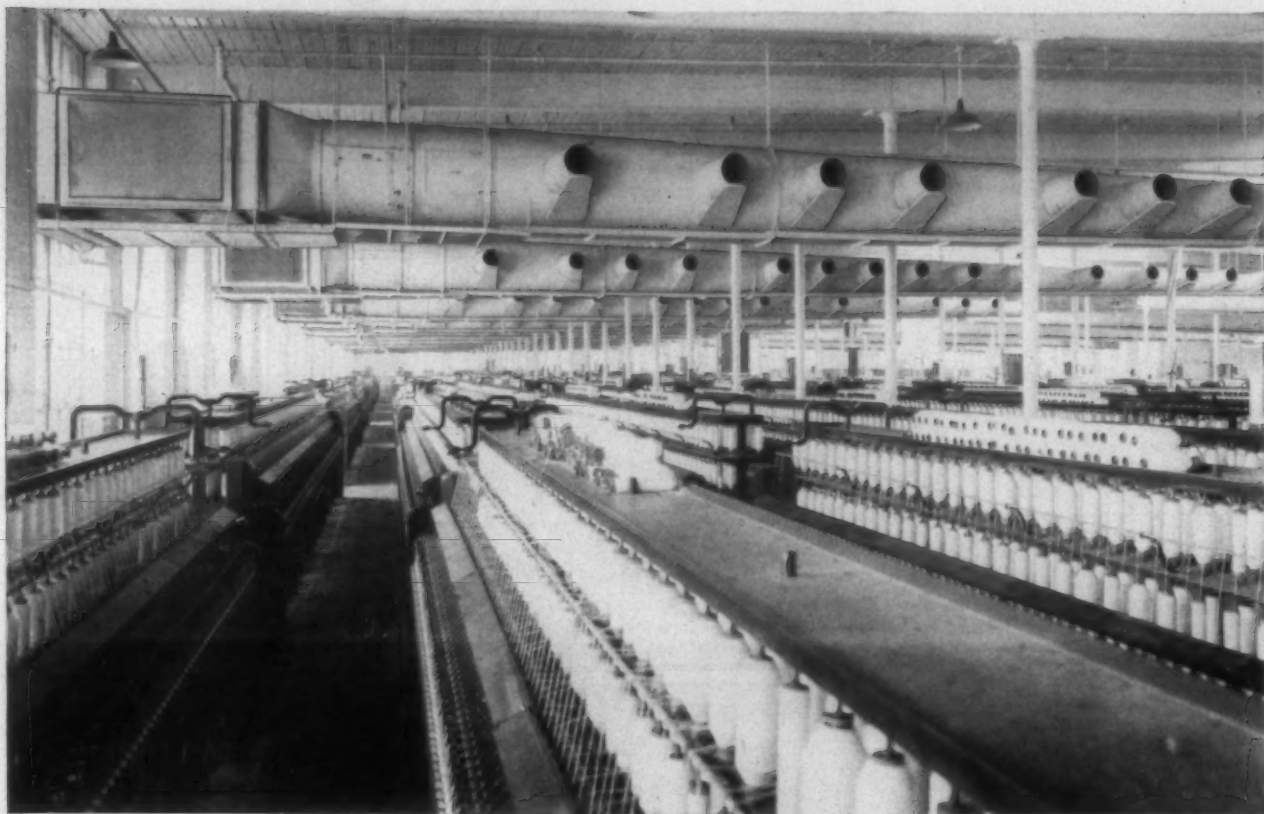


### **THOUSANDS IN USE**

Ideal for work in narrow aisled  
factories, warehouses and in box  
cars. The 1-ton capacity Hyster  
"20" is only 37 inches wide.



# TEXTILE *Air Conditioning-*



SPECIFY

*The Bahnson* **HUMIDUCT**

REG. U. S. PAT. OFF.

A unit system of air conditioning for humidifying, cooling, heating, ventilating, filtering and dehumidifying in any desired combination.

*Described in detail in Bahnson Bulletin No. 330*

**Bahnson**  **System**  
AIR CONDITIONING ENGINEERS  
THE BAHNSON CO WINSTON-SALEM, N. C.

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703 Embree Crescent, Westfield, N. J.  
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553 S. Figueroa St., Los Angeles, Cal.





## The Armour Soap Sleuth

answers a Mill-Manager's  
questions about

**"411"**

**"Just what is this new '411' I've been hearing so much about?"** Answer: "411" is Armour's new synthetic detergent developed specifically for industrial use. Chemically, "411" is the sodium salt of a sulphonated hydrocarbon . . . an anionic surface-active agent having high wetting and detergent properties.

**"What properties of '411' make it useful to me?"**

Answer: "411" is an efficient wetting-out agent that lowers surface tension sharply, even in low concentration . . . is readily soluble in hot or cold water . . . is unaffected by hardness of water . . . rinses easily and completely, leaves no film . . . can be used in acid or alkaline solutions, in a 1% solution has a pH of 8.5 . . . has good emulsifying properties . . . is stable to oxidation . . . is white in color, with no objectionable odor . . . is exceptionally uniform in performance and appearance.

**"What are some of '411's' important textile uses?"**

Answer: "411" is effective in wool scouring even in hard water, particularly in the final low-temperature rinse—"411" is used in the scour after the fulling process to remove any residual fulling oils from woven woolen cloth—"411" may be used in the after-washing of cotton and rayon print goods to remove gums and other thickeners—"411" is excellent for the after-washing of resin finishes used for crease-resistant rayons and prevents the development of odor during storage—"411" may be used with alkalis in the kier boiling of cotton grey goods for whiteness and absorbency. For silk degumming, "411" used in combination with soap gives more rapid rinsing and prevents formation of lime soaps—"411" added to regular bleaching agents gives more uniform bleaching results—"411", as a penetrant and wetting agent, serves as a leveling agent to give more even shades in dyeing operations.

*"Remember—it's ARMOUR'S for the best in  
SOAPS AND SYNTHETIC DETERGENTS"*

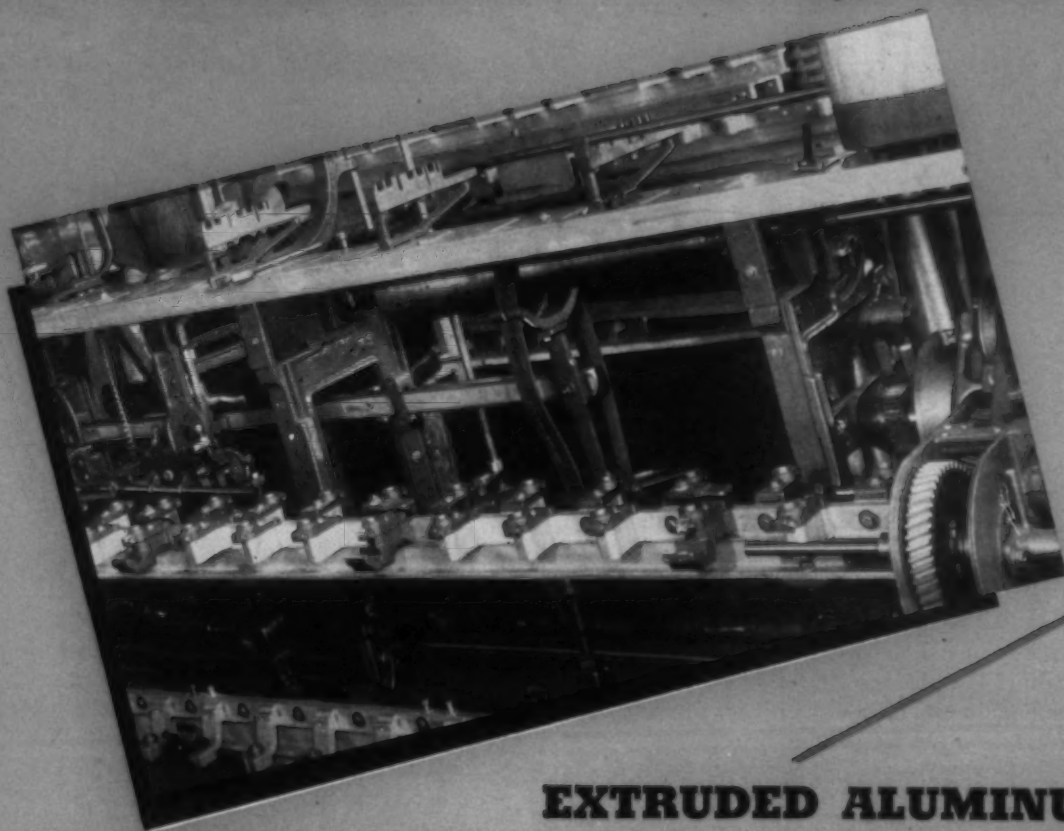


**Armour  
INDUSTRIAL  
Soap**

Armour and Company, 1355 W. 31st., Chicago 9, Ill.



# THE ACHIEVEMENT OF QUALITY



## EXTRUDED ALUMINUM

After exhaustive research the H & B engineering department, working in close cooperation with metallurgical engineers of the Reynolds Metals Company, has successfully replaced cast iron with extruded aluminum on Spinning Frames, Roving Frames and Twist-ers wherever such replacement was advantageous.

Now, we offer you textile machinery with superior and more costly extruded aluminum replacing 3 times heavier cast iron. Because aluminum absorbs vibration the reduction in weight has not impaired the smooth performance of H & B machinery. The new extruded aluminum parts have been designed to provide maximum structural strength using a minimum amount of metal. This effects further weight saving.

Aluminum reduces the weight of movable parts such as ring rails and bobbin rails. This, with corres-

ponding reduction in weight of counterbalances, means less load on the builder motions. Mills benefit directly as much as 10-15% reduction in shipping costs due to the decreased weight of the extruded aluminum parts.

Another advantage of extruded aluminum is its good appearance. Rust free, non-corrosive aluminum invites the small amount of attention necessary to keep your machinery spotlessly clean. Maintenance costs are less, too. Extruded aluminum is not brittle and does not break as cast iron often does when carelessly handled.

To summarize: A new metal, superior in the job it does, has been successfully adapted for textile machinery, and the benefits of this progress that is part of the achievement of quality at H & B are immediately passed along to you.

# H & B AMERICAN

*Builders of Modern*

FACTORY, EXECUTIVE OFFICES AND EXPORT



# AT H&B



## EXTRUDED ALUMINUM PARTS

### SPINNING FRAME

Roller beams  
Ring rails  
Spindle rails

### ROVING FRAME

Roller beams  
Bobbin rails  
Snug rails  
Snugs  
Octagon rolls  
Casing-off plates (Sheet aluminum)

### TWISTER

Roller beams  
Ring rails  
Spindle rails

# MACHINE CO.

*Textile Machinery*

DIVISION

PAWTUCKET, RHODE ISLAND, U.S.A.

### BRANCH OFFICES

ATLANTA, GA.  
815 CITIZENS AND SOUTHERN  
NATIONAL BANK BUILDING  
CHARLOTTE, N. C.  
1201 JOHNSTON BUILDING





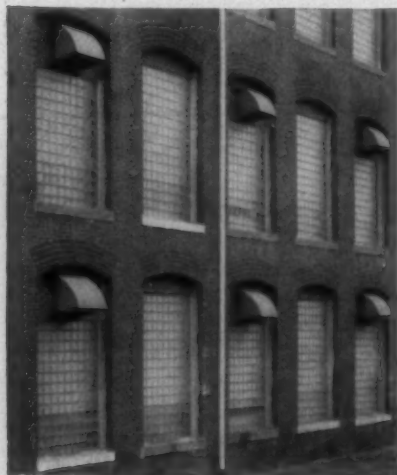
AMCO fan units for controlling air intake are easily installed without sacrifice of interior machine set-up.

## EQUAL THESE

### BENEFITS FROM AMCO HUMIDIFICATION AND COOLING

- Reduces excessive temperature and holds relative humidity at point best suited to fibre and process.
- Increases worker comfort and efficiency.
- Speeds production in high friction (heat) areas.
- Assures even yarn counts and increases breaking strength.
- Waste and fly greatly reduced.
- Gradually increases regain for good roving and consequent better spinning.
- Drafting of fibres smoother and more compact.

Modern, insulative glass bricks pave the way to interior heat and moisture control in this mill. AMCO fan-powered air intakes alternate with automatically controlled vents.



• If your mill is already equipped with a humidification system, you have taken the first step to improve quality and increase production.

Your next step—AMCO Evaporative Cooling—utilizes your present humidification system to obtain top quality and maximum production.

With the AMCO Evaporative Cooling System the desired relative humidity is accurately maintained by introducing atomized water spray.

The frictional heat of high speed machines is absorbed by evaporation of the moisture in conjunction with carefully controlled air flow. No expensive changes are necessary . . . no air ducts to install . . . no jump in maintenance costs.

Why not take this second step now? An AMCO engineer will be glad to show you how you can modernize your plant simply and economically for better quality and increased output.

# AMCO

## HUMIDIFICATION and COOLING

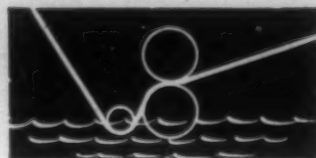
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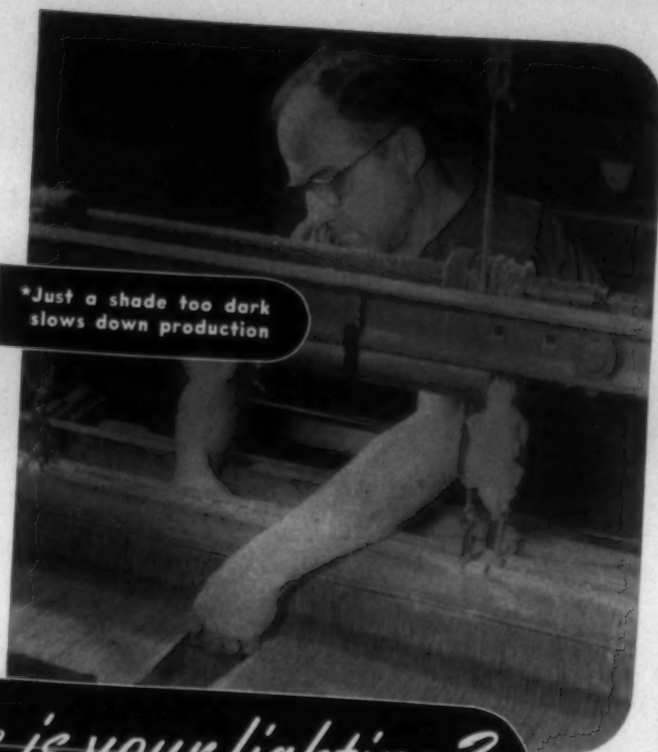


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Put Wheeler Skilled Lighting to work in your mill and profit by its improvement over Borderline Vision. Write Wheeler Reflector Co., 275 Congress St., Boston 10, Mass.

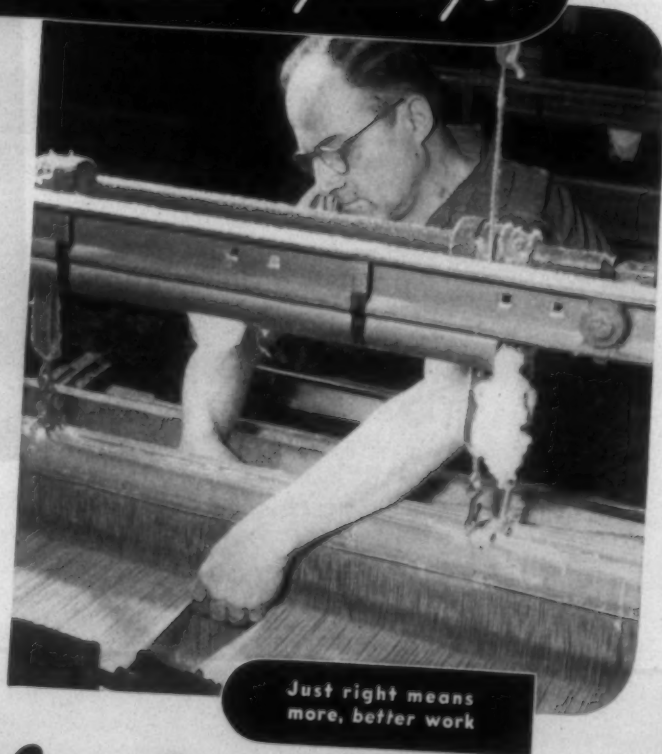
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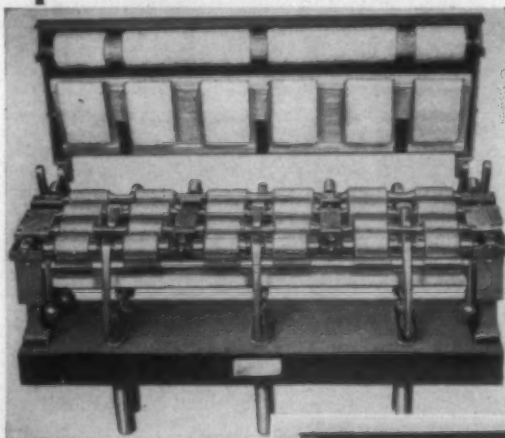
## NEW SACO-LOWELL CONTROLLED DRAFTING ASSEMBLIES FOR ROVING AND SPINNING

These Saco-Lowell drafting assemblies for Roving and Spinning offer mills a range of equipment which can process with equal efficiency Cotton, Rayon, Wool or Blends. Their flexibility, with regard to both character and staple length of stock which can be processed, is such, that yarns most in demand to meet fashion's latest requirements can be furnished without necessitating any extensive mechanical changes or added capital investment.

### SACO-LOWELL SHOPS • BOSTON

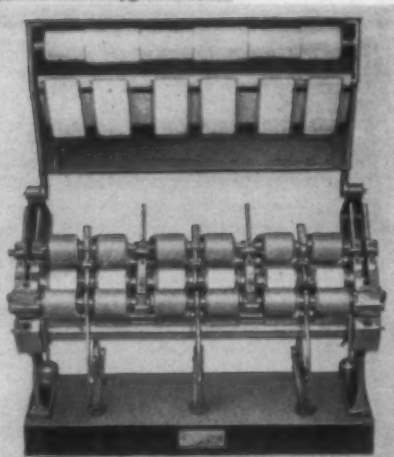
SHOPS AT BIDDEFORD, MAINE

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#### ROVING

The Saco-Lowell J-3 Controlled Draft Unit is the standard roving drafting assembly used to process cotton. The practical drafts range from 10 to 24 on carded stock and up to 30 on combed stock. It can also be used for the synthetic fibres up to 1 1/8".

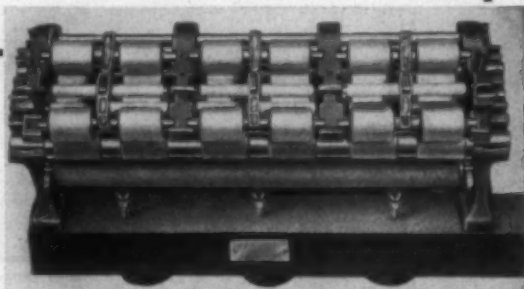
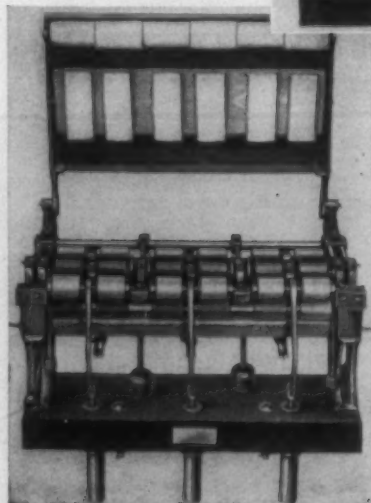


#### ROVING

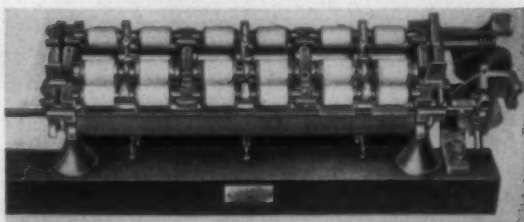
The FS-2 Controlled Draft Roving Assembly is equally efficient on stocks consisting of cotton, synthetics, wool, or mixes of these fibres. This assembly has the ability not only to handle a very wide range of staple lengths, from short cotton to 2 1/2" synthetic fibres, but also blends of widely variable staple lengths. Depending upon the material, drafts of up to 40 may be used.

#### ROVING

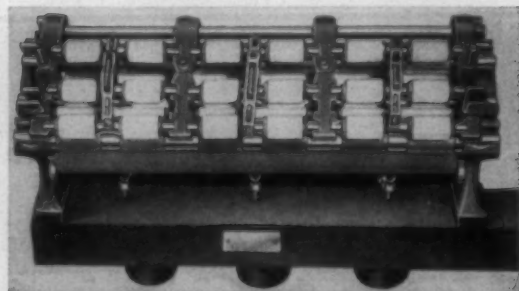
The FS-1 Controlled Draft Roving Assembly, sometimes called the 3 over 4, is especially designed for synthetics and blends containing fibres up to 3" long. It can be operated with drafts as high as 20 to 24. It can also be used for processing short wool tops.



SPINNING. The Z-2 Spinning System is used for the processing of long-staple synthetics and natural fibres such as wool. While it will process cotton satisfactorily for medium and coarse counts, it is especially designed for synthetics and blends containing fibres up to 3".



SPINNING. The Shaw Controlled Draft Spinning System is especially adapted for the production of fine combed yarns. Drafts range from 25 to 40. This system employs a new principle which will have far-reaching effects on the technology of cotton spinning.



SPINNING. This Better Draft Spinning has been standard for the production of cotton yarns since 1926. It is equally efficient on carded or combed stock. The drafts can go as high as 16 to 18 with carded stock, 18 to 22 with combed stock.



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## History Of Cotton Textile Manufacturing In The United States—1787 To 1947

— A Study Prepared by the Cotton Mills Information Service —

THE history of cotton textile manufacturing in the United States undoubtedly could be said to have started with the arrival of the earliest settlers, for the making of cloth on hand looms was as much a part of the life of those times as the preparation of food. Flax, wool and cotton were certainly spun and woven in the homes of most of the early families. For example, Thomas Jefferson not only grew cotton, but made cloth from crude spinning and weaving machines which were installed in Monticello. But within a few years, the uneconomic aspects of home weaving became more and more noticeable and attempts were made to set up commercial mills to handle the various fibers. The need for greater manufacturing production was especially felt, of course, when the Revolutionary War shut off the supply of British textile goods.

There is no accurate record of what might have been the first American industrial plant for the spinning and weaving of cotton. However, one of the first plants to stay in operation for any length of time was in Beverly, Mass. At the spot where it stood there now stands a tablet which reads: "Here the first cotton mill in America was built, 1787; incorporated Feb. 3, 1789; visited by Washington, Oct. 30, 1789; burnt, 1828." There is some doubt about the actual construction date, but no less an authority than George Washington provides certain proof that the Beverly mill was a going concern in 1789, for his personal diary records a visit to it in that year. On the morning of Oct. 30, 1789, six months to the day from the date of his inauguration as first president of the United States, Washington rode his horse from Salem to Beverly, breakfasted with George Cabot, one of the owners of the new mill, then made his inspection tour through the factory.

Frances Little in *Early American Textiles* reveals the Beverly mill was powered by a team of mules driven around a turnstile. This same book also mentions a "manufactory" which was established in Philadelphia in 1775, but this was a short-lived enterprise due to the invasion of the city in 1777 by British troops. The Beverly mill continued to operate until 1815, according to the Beverly Historical Society. Early records indicate the machinery was transferred to a new factory erected at the head of a nearby river, where water power was available. The brick mill structure remained standing until 1828 when it was destroyed by fire.

Although some other mills may have preceded it, the mill that is really considered as representing the birth of the industry in the United States is the Slater Mill in Pawtucket, R. I. This, the first successful mill to be operated throughout by water power, is still intact and is now a museum to the public. Of humble family, Samuel Slater was born in England in 1768 and was apprenticed at the age of 15 to Jedediah Strutt, partner of Sir Richard Arkwright, in England's first "modern" mill to be equipped throughout with Arkwright's improved machinery, a system of cotton processing which remains as the basis of present-day textile manufacturing. After completing his 6½ years of indenture, young Slater heard that textile mechanics were in great demand in the United States, so he promptly decided to seek his fortune in the young republic.

But British law prohibited exporting of textile tools or plans of machines and likewise forbade, under heavy penalty, any textile machinist to leave the British Isles. Slater nevertheless slipped out of the country, disguised as a farm hand, and arrived in New York in 1789. He learned that a prominent Rhode Island business man, Moses Brown, was having trouble setting up a "cotton manufactory" with crude spinning jennies and machines modeled from those in the Beverly, Mass., mill. Slater offered his services for whatever Brown should decide they were worth. Brown accepted, offering a generous share in the profits and promising to give Slater full credit for what success he might achieve.

Slater boldly proposed to discard the entire set-up and to rebuild the mill of Almy and Brown in Pawtucket, R. I., installing instead the Arkwright types of machines. Most important of these was the "Arkwright water frame" for spinning, the secret of which was the drawing of cotton through sets of rollers along with a twisting motion. Operated by water power, this was the first power-driven textile machinery that anyone ever attempted to build in America. Slater promised that unless he could make as good yarn as they did in England he "would have nothing for his services." Without drawings, models, tools or skilled mechanical help, Slater relied entirely on his memory and ingenuity to duplicate England's jealously guarded secret. He succeeded and in three months had the mill operating. During those first years, Slater himself had



to break the ice that formed around the mill water wheel on cold winter nights and the exposure he suffered led to poor health in his middle age.

The success of his venture was so great that in 1793 the firm of Almy, Brown and Slater erected the Slater mill in Pawtucket which still stands (he made sure the water wheel was enclosed). Some of Slater's original machinery is still on display in the old mill. In 1793, at the very time Slater was pioneering in modern cotton manufacturing methods, the infant industry was given a big boost by Eli Whitney's invention of the cotton gin, which made the supply of raw cotton suddenly abundant. Slater founded several more plants in nearby towns and within 25 years there were 140 cotton mills in a 25-mile radius of Providence, R. I. At least two presidents (Monroe and Jackson) honored Slater with personal visits and it was Jackson who named him the "father of American manufacturing." One of Slater's prime interests, incidentally, was the welfare of his employees and for them he founded a Sunday school in 1793, believed to be the first of its kind in America.



Slater died in 1834 at the age of 66, but he lived to see other New Englanders make vital contributions to the growing industry. When the War of 1812 once again cut off the supply of cheap cloth from England, many wealthy merchants became interested in investing their funds (money made idle by the slump in commerce) in new industry. One of these was Francis Cabot Lowell, who happened to take a trip to Scotland and England for his health in 1811, shortly before the outbreak of war. Son of a judge, a Harvard man, representing the uppermost level of New England society, young Lowell at the same time had a mathematical turn of mind and was so interested in mechanics that he visited some of England's leading cotton mills. He was especially impressed by new power-driven looms just being put into use, machinery unknown as yet in America. On his voyage home as war broke out, a British frigate captured his ship and all his possessions were scrutinized by officers. Lowell and his family were interned for a time in Halifax, Nova Scotia, but managed to make their way to Boston by hiring a small boat.

Soon Lowell, resorting solely on his memory as Slater had done, succeeded in constructing America's first power loom. Hitherto, although Slater had perfected the process of manufacturing yarn, "cottage weavers" still made most of the cloth in homes or in small mills with hand looms. Lowell and his close friends immediately raised funds for the establishment of a new kind of mill, built around Arkwright spinning frames and the power loom. Their factory, called the Boston Mfg. Co., was erected on the bank of the Charles River in Waltham, Mass., and here in 1813 all steps in cotton manufacture, from bale to woven fabric, were carried out under one roof for the first time in history.

Within a few years, although Lowell did not live to see his dream come true to its fullest extent (he died at the age of 42), the company had grown so large that greater water power facilities were required, forcing a wholesale removal to the Merrimack River. The great textile city which sprang up from this enterprise was named for Francis Cabot Lowell. His plans for the welfare and social betterment of the firm's employees were carried out by his friends, and soon the city was a center of 19th century culture. Emerson, Longfellow, Charles Dickens and many other celebrities made numerous visits to Lowell, to lecture to the employees there.

Although New England is usually thought of as the birthplace of the textile industry, it was not very long before it branched out into other areas. A few years after the establishment of the Slater mill, William Mowry, a young man not yet 21, left his father's farm in Woodstock, Conn., and went to Pawtucket to work in the newly-formed mill. He was a natural manufacturer, fascinated by the machines and the hum of spindles. The magic of spinning yarn and weaving cloth got into his blood. He studied the machines, learned all the processes and after a few years made the request that he be taken in as a partner. His request was pre-emptorily rejected but a short while later a man by the name of Job Whipple from a place known as Whipple City, later to become Greenwich in Washington County, N. Y., came to Rhode Island in search of a competent person to join him in building a cotton mill.

Job Whipple sold Mowry a half interest in the water power at his flour mill in Whipple City and together they erected a cotton factory. Young Mowry later married Whipple's daughter Lydia. All through the War of 1812 the New York mill operated at capacity. However, young Mowry nursed the idea that some improvements might be made in the machines if he made a tour of the British mills. When the war was not long over, he decided to visit England and study the mills over there, taking with him a machinist from the village of Hudson named Wild who had the reputation of being able to make anything from a needle to a steam engine. In England they were treated courteously enough, but in travelling through the manufacturing districts the Americans were systematically barred from the mills. Then, according to an account published some years later in the *Greenwich Journal*, they decided to take the bull by the horns.

At the risk of being ejected they disregarded the "No Admittance" signs and walked into a Liverpool mill without permission. They found themselves in a room where they were amazed to see a "double speeder" in operation. Back in America there was but one row of spindles on the roving frame but here were two. It was an amazing discovery. It was revolutionary. How could it be done? Every spinner's eyes were on the two foreigners. They proceeded to examine the machine. Then the overseer entered and seeing the Americans hustled them double-quick to the door. Mowry was a little crestfallen but Wild assured him he could make a like machine, so they returned to the United States. In a short while, Wild was able to duplicate the double speeder. The new machine was set up in the Greenwich mill and the people of Greenwich were so elated that by acclamation they exempted the mill from taxation and Mowry from military and jury duty.

But that was not the end of the matter. The following is from the *Greenwich Journal* of that time: "When the



A large spool of thread, likely for sewing, is shown against a dark background. The spool is cylindrical with a central hole. The thread is wound in a dense, uniform pattern. The text is printed in a dark color on the side of the spool.

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news reached England, it aroused the jealous feeling of the manufacturers. . . . In their frenzy, they concocted a diabolical scheme to destroy the life of one of our estimable citizens by means of an infernal machine, which was marked and directed to the person who first introduced the double speeder in America. The machine was sent as freight on board one of our packet ships then lying at the dock in London, bound for New York, where she safely arrived. Fortunately, when discharging her cargo, the machine slipped from the car hook and fell with a crash upon the wharf, causing it to explode without injury to any person."

Even while Slater was launching textile manufacturing so spectacularly in New England, efforts were made to start up the industry in the South. Early records tell of two mill enterprises begun as early as 1789, one on the banks of the Santee River near Stateburg, S. C., where an attempt was made to harness water power. In the same year, a widowed woman known to history as Mrs. Ramage established a crude cotton mill, powered by mules, on James Island near Charleston, S. C. Neither company was long lasting, although the Stateburg mill is said to have produced "Manchester cotton stuffs" on a system of machinery closely resembling lines that are the basis of present day manufacture.

The first successful mill in the South was that erected by Samuel Schenck near Lincolnton, N. C., in 1813, known as the Lincoln Cotton Factory. Many of the machines were manufactured in Rhode Island and hauled to Lincolnton by wagon from Philadelphia. This mill operated until the War Between the States, when it was burned. In the same year, 1813, was established the Wm. Whitaker & Sons mill at Philadelphia, oldest in the country to be owned and operated on the same premises by the same family. Present owners are the seventh generation of the founder's family. A record nearly as long marks the Rocky Mount Mills at Rocky Mount, N. C., established in 1818 by Joel Battle, a well-to-do planter. Today these mills remain under management of the Battle family.

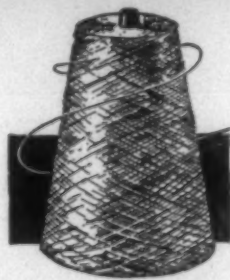
With the invention of the steam engine, cotton manufacturers helped pioneer in the use of steam. Slater and his sons, for example, built their famous "Steam Mill" in Providence in 1827. First to employ steam in the South were the Mount Hecla Mills at Greensboro, N. C. Machinery for this plant was shipped from Philadelphia to Wilmington, N. C., thence up the Cape Fear River to Fayetteville, then was hauled overland. When wood for fuel grew scarce, the mill was moved to Mountain Island and run by water power.

As mills began to dot the entire eastern seaboard, the Simpson family established the Savage Mfg. Co. at Savage, Md., making use of a mill structure said to date back as far as 1750. History tells little, however, of the nature of its operations prior to 1825.

It is interesting to note that textile manufacture in the South during the early days consisted for the most part of making yarn for purely local, domestic use. Lack of a ready market and the inadequate distribution facilities of the time retarded industrial growth, as compared with the more concentrated population of New England. Then, with Whitney's invention of the cotton gin coming into greater use, Southern investors gave their primary attention to cotton growing rather than manufacture.

William Gregg is acknowledged as the South's real pioneer in large-scale textile manufacturing. The mill which

he built in 1845 in Graniteville, S. C., is still operating under its original charter and today it is one of the seven units of the Graniteville Co. Gregg, early crusader for the industrial expansion and social betterment of the South, in opposition to the differences of the slave-holding plantation owners built mill villages of comfortable cottages, many of which stand today. He prohibited child labor and school attendance was compulsory. He furnished free textbooks and used only free white labor at a time when some factories were using slaves. He was born Feb. 2, 1800, in what is now northern West Virginia. As a young man he became a watchmaker, silversmith and jeweler in Columbia, S. C., and accumulated a fortune comfortable for his day.



Temporary ill health caused him to live for a while near the home of his wife's parents in South Carolina. A nearby cotton factory was having difficulty and in 1832 he bought into it and soon it was making money. A little later he moved to Charleston and became a leading silversmith and jeweler there. About this time, too, he began publishing essays that were contrary to the political and economic facts of his day. These today are still widely read documents. Finally, he decided to prove his theories and secured from the legislature a charter to build a cotton mill. Many years ahead of his time in social reform, Gregg proved that his ideas were workable by making an outstanding success of the new venture. He died as he lived—with his workers. A flood broke the dam of his mill stream. He worked deep in the water with his men and a few days later died of pneumonia.

One of the characteristics of the industry has been the growth of the mill village. In the early days of the industry's expansion, particularly in the South, many townships urged the location of mills in their area through the granting of tax exemptions and other inducements. Generally, however, housing accommodations were inadequate to provide for the number of employees needed for the new project. As a result, it became the general custom for the company, in addition to constructing mill buildings, to construct houses for its workers. Often, too, recreation halls, stores, and other community services were provided. As time went on, many of these mill villages became modern communities with some having the most modern type of housing construction, plus such things as golf courses, swimming pools, tennis courts, day nurseries, hospitals, clinics, and other facilities. Although in recent years many of the companies have sold the homes to the workers, the villages are often still outstanding for their smart appearance.

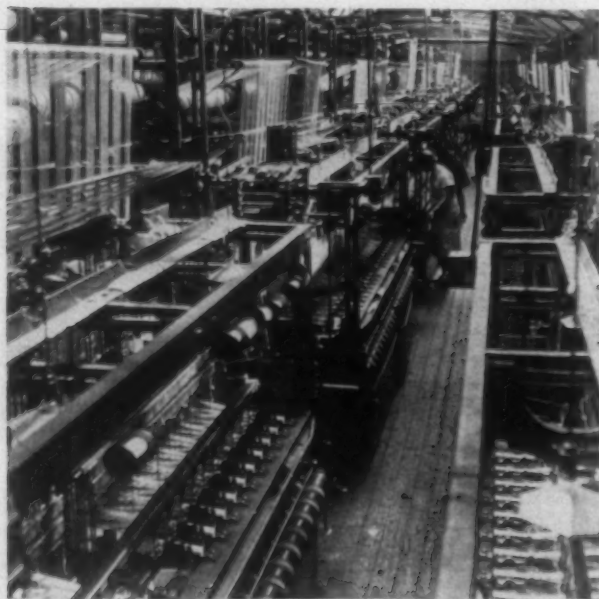
War, of course, put a tremendous strain on the cotton textile industry as it did nearly all industries. Modern warfare required more of everything. The demand for millions of yards of duck, cloth for uniforms and other apparel, mosquito netting, sewing thread, and thousands of other items, forced the industry into the (Continued on Page 61)



# Webbing Loom Weaves Without Shuttle

THE textile industry has heard a lot of talk about shuttleless looms since World War II ended. "Shuttleless," of course, is a relative description, because in any woven fabric there necessarily is a filling yarn and there in turn has to be some means of carrying the filling through warp yarns. Strictly speaking, the Warner & Swasey Co. loom pictured and described in the July 1, 1947, issue of TEXTILE BULLETIN has no shuttle; the filling yarn is carried by a small steel gripper which, although serving the purpose of a shuttle, obviates the necessity for bobbin winding by drawing the filling yarn from a single cheese.

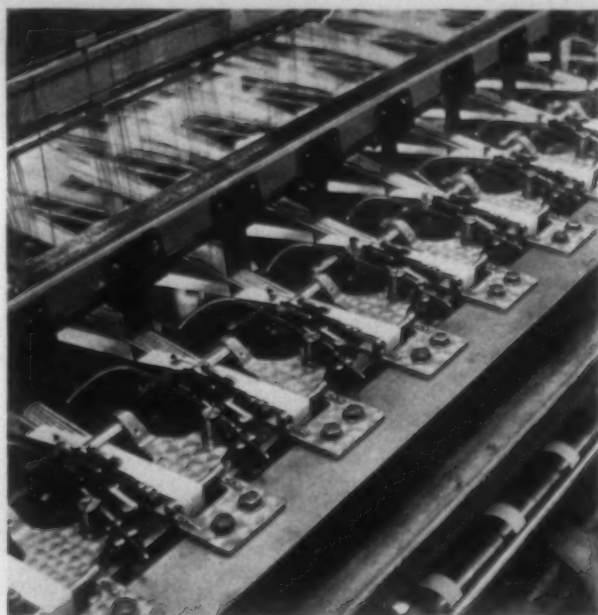
Clutson Machines, Inc., 205 East 42nd Street, New York City, currently is distributing in this country an English-made unit which is described as operating on an entirely different principle from the usual narrow fabric loom. Three views of the Clutson high-speed shuttleless loom in operation are printed on this page.



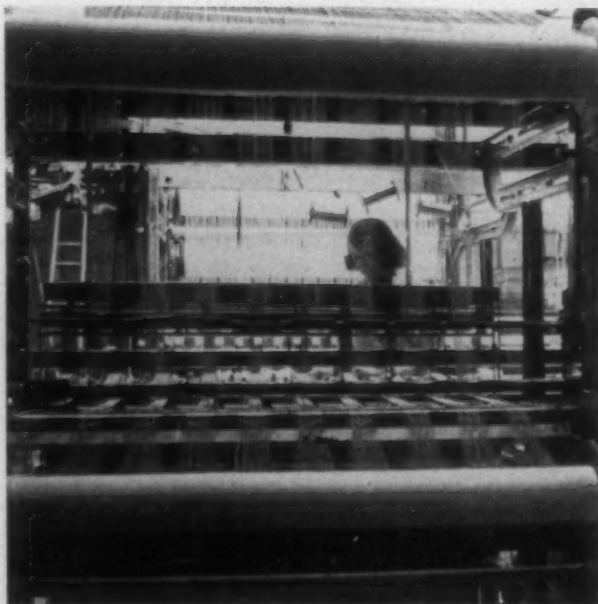
The loom was invented by Charles Clutson of Coalville, Leicester, England. Three models are being produced, and the New York firm is at present in a position to deliver and erect within six weeks from receipt of orders. The narrow fabric looms contain 16, 20 or 32 heads, depending on the width of webbing to be woven. The 32-space machine will produce to three-quarters of an inch, the 20 space to  $1\frac{3}{4}$  inches, and the 16-space up to a maximum width of  $2\frac{1}{2}$  inches. At Sylacauga, Ala., Avondale Mills has installed a group of 20-space units which will produce a variety of tapes, ribbons and elastic webbing at a speed of 220 picks per minute.

Filling feed is continuous from cones of yarn. There is an electric stop motion device on all models which, when a filling break occurs, shuts down the entire machine. A one-horsepower, 1,150-1,200 r.p.m. motor is sufficient to run

any of the looms. Each machine is supplied with either a dobby or cam box, according to purchaser's option. Warp is fed from broad beams which are controlled automatically and assure even tension throughout.

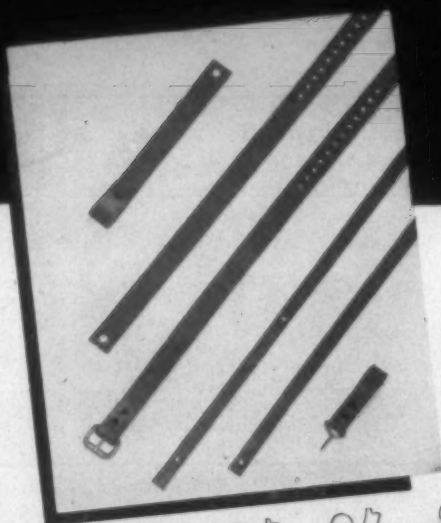


On webbing averaging 30 picks to the inch production will reach approximately 10,000 yards per week per machine on a 40-hour shift. On elastic webbings one weaver can operate four machines regardless of the model. On rigid webbings, such as tape, ribbon, etc., one weaver can operate six machines.





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## WEAVE ROOM EQUIPMENT



# Spinning Worsted Type Yarns On Cotton System Machinery

By PROF. JOHN F. BOGDAN, School of Textiles, North Carolina State College

— From THE TRAVELER, Victor Ring Traveler Co. —

THE fact that modern cotton-type machinery designed for processing long-staple synthetics has been utilized to spin 100 per cent uncut fine wools up to four inches in fiber length with tremendous savings over the worsted system is well known in the textile industry. This article attempts to show details of this method and suggests investigations which may be of interest to many cotton system spinning mills.

The suggestion has been ventured that this new method of all-wool spinning be labelled the "American System." This seems a fitting title and has this author's vote; certainly it has advantages over the "100 per cent Uncut Wool on Cotton Machinery System" as an identification.

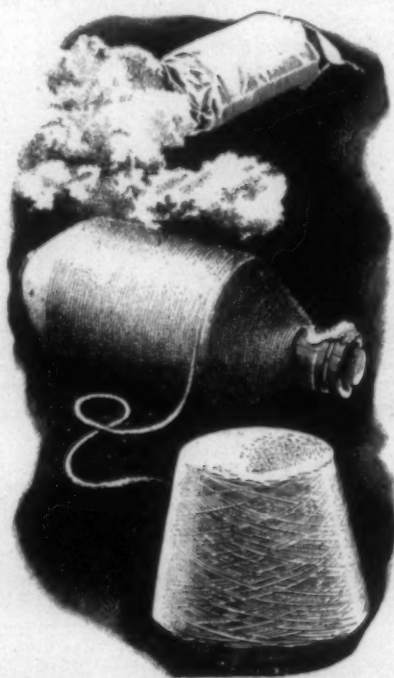
The beginning of this development, which has important economic implications, can be traced to certain mills processing blends of wool and other fibers on cotton machinery, and to the machine builders' laboratories. Natural curiosity prompted men who had been processing blends containing as much as 60 per cent cut wool to note the result of spinning 100 per cent cut wool. That the result was a yarn which was comparatively uneven, weak, and which had a low limit of fineness answered the question for some; others, seeking an explanation, realized that the trouble lay in the fact that the stock contained a large number of extremely short fibers which were formed in the top cutting operation and that fiber parallelization was lacking. The cure for both these ills was the use of the combed, uncut top as feed for the drawing frame.

Another important benefit which accrues from this device is the elimination of the picking and carding operation. Certainly it seems illogical, for this purpose, to purchase a material which has been processed to the point that the fibers are made to lie parallel in a convenient form for further processing, and then cut up this material for use as a raw stock at the picker.

Mills which do not have machinery capable of maintaining wide roll settings in the drafting zones may be unable to process, without cutting, wools which are considered now to be standard quality for blends, and so may feel that this development is of no interest to them. These mills should note that it is possible to procure extremely fine wools with maximum staple lengths not greater than two inches. This wool can be processed into very fine yarns on machinery found in most cotton spinning mills. The possessors of long-staple drafting machinery are able to process Australian and domestic wools of about 64s quality, with staple lengths up to four inches, into yarns which are indistinguishable from those made on the worsted systems.

If blends of wool and synthetic fibers made on the drawing frame are considered to achieve a practical homogeneous

blend in the yarn, it is possible to use uncut wool slivers for blending. The resulting yarn will be found to be stronger, more uniform, and can be spun to finer counts than is possible with stock containing the same percentage of cut wool.



During the processing of all-wool stock the problem of static will be probably the most vexing one. The selection and control of proper temperature and humidity are important, and, even then, the use of static eliminators may be found necessary on the drawing frames. Too high a humidity prevents good drafting, and causes licking and lapping about the rolls; too low a humidity makes the fibers brittle, allows generation of static, and encourages the formation of fly and waste.

The following organization was used to spin a 40s worsted count yarn from wool top with four operations: two drawing operations, one roving, and spinning. This organization is by no means the only possible one, or the ideal one. It merely represents an attempt based on the utilization of available machinery. It is felt that the use of a long-draft spinning frame would have produced a stronger yarn and would have made possible higher spindle speeds. Larger front steel spinning rolls than the one-inch rolls used are desirable to facilitate removal of long-fibered laps about the rolls. Had it been possible to select tops, one made of shorter wool on the French worsted system would have been



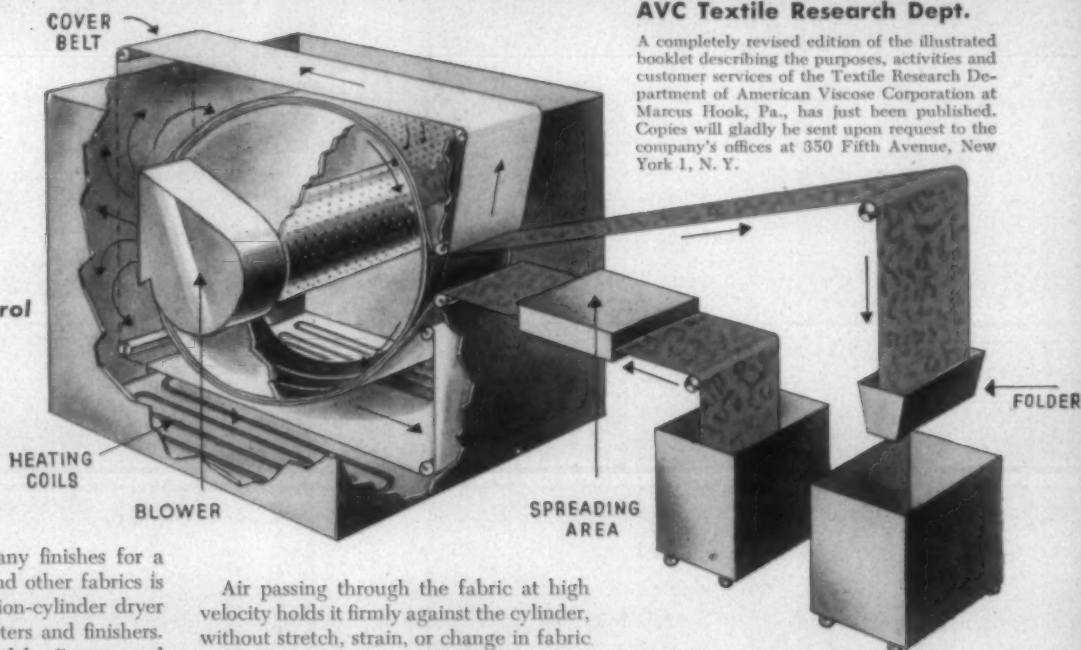
# Rayon Reports

Prepared Monthly by American Viscose Corporation, New York, N. Y.

JULY, 1947

## New Suction-Type Cylinder Dryer

**Saves Time,  
Handles Variety  
of Fabrics,  
with Precision Control**



### Revised Booklet Tells Story of AVC Textile Research Dept.

A completely revised edition of the illustrated booklet describing the purposes, activities and customer services of the Textile Research Department of American Viscose Corporation at Marcus Hook, Pa., has just been published. Copies will gladly be sent upon request to the company's offices at 350 Fifth Avenue, New York 1, N. Y.

Quality control over many finishes for a wide variety of rayon and other fabrics is achieved by a new suction-cylinder dryer now available to converters and finishers. The dryer was developed by Proctor and Schwartz, Inc., and jointly the Textile Research Department of the American Viscose Corporation.

The fabric is entered into the machine through a spreading device and is then fed onto a scrim-covered, perforated, revolving cylinder. A continuous cover-belt of very open mesh holds the fabric in position on the cylinder.

Blowers force air, heated to desired conditions, through the cover belt, fabric and cylinder. Disks on the cylinder shaft are adjustable to fabric width to confine air flow solely to the area covered by the fabric.

Air passing through the fabric at high velocity holds it firmly against the cylinder, without stretch, strain, or change in fabric width. In addition, heated air passing through the fabric has proved a much more efficient drying means than conventional air "impingement," in some cases reducing drying time from thirty minutes to five.

The entire mechanism can be instantly stopped and reversed if defects are discovered in goods about to enter the dryer, thus preventing the defects from passing through the machine and becoming permanently set in the finish.

The dryer has been thoroughly proved in practical service on tricot fabrics, circular knit fabrics, open-width woven fabrics, on resin finishing, rayon and silk prints and others. One man can operate it.

### MAKE USE OF *Avisco* 4-PLY SERVICE

To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

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- 2 FABRIC DESIGN
- 3 FABRIC PRODUCTION
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## RAYON 20 YEARS AGO



More rayon has been blended with wool for women's apparel this fall than in any previous year.

Don't just substitute rayon for other fibers, advises a trade authority. Consider its own distinctive characteristics when planning a new rayon cloth construction.



Practically all leading dress goods manufacturers are now using rayon in some manner—and their products are displayed by nearly every dress shop in the country!



FIRST CHOICE IN APRON LEATHERS

# LAWRENCE

Long Draft  
Apron Calf

It's Better Naturally



ferable. Drawing and roving frame speeds were those considered normal for cotton processing.

#### Organization for 40s Worsted

*Stock*—Australian 64s wool; Bradford oiled top, 250 grains/yard; maximum staple,  $4\frac{1}{2}$  inches. (Note: Oiled top was found to process with less difficulty than dry top.)

*Conditioning*—It will be found beneficial to condition the balls of top for many hours at approximately the same condition of humidity and temperature that will be found during the first drawing operation. The room atmospheric conditions which seemed to give best running conditions in all operations were 65 per cent relative humidity and 80° F.

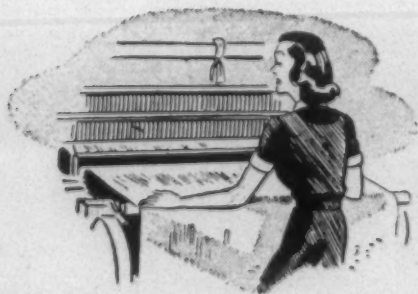
*First Drawing*—Frames, controlled draft drawing; feed, one end of 250 gr. top; delivery, 50 gr. sliver; roll setting, back to middle—four inches, middle to front— $4\frac{1}{2}$  inches. One line of top rolls was removed to allow the above roll settings. The ball of top was placed on an unrolling attachment at a low level in back of the machine. A slowly rotating paddle arrangement, striking against the top as it passed to the back rolls, tended to open and flatten the material so that it was distributed evenly across the width of the rolls. Static eliminators were placed over the stock at the point where it left the front rolls. Static generated during passage of the material through the tube gear was still bothersome. This plaque was eliminated, for practical purposes, by removing the tube and substituting a pair of geared rolls to deliver the material into the can.

*Second Drawing*—Feed, five ends of 50 gr. sliver; delivery, 50 gr. sliver. (Note: A third drawing operation was not used, but may be helpful.)

*Roving*—Frame, controlled draft roving; feed, 50 gr. sliver; delivery, 4.00 hank roving.

*Spinning*—Frame, three line conventional with slip draft roll; feed, 4.00 hank, double roving; delivery, 27s cotton count equals 40s worsted count; twist, 17 turns per inch; ring,  $1\frac{7}{8}$  inches; spindle speed, 6,000 r.p.m. By applying an effective pressure of 74 pounds on the front top roll and 18 pounds on the back roll it was possible to spin this stock with a setting between these two weighted rolls as short as  $2\frac{3}{4}$  inches with no cockling of yarn resulting. Synthetic cots were used for the front top rolls, and cork for the back top rolls. The middle roll was leather-covered of the Washburn self-weighting type. Revolving clearers were used.

*Yarn Characteristics*—The single yarn was judged to be as even as the Bradford system yarn of the same size which was used for the standard. Yarn strength was slightly higher than that of the Bradford system.



*Cloth Characteristics*—After twisting two-ply, the yarn was used as warp and filling in a gabardine weave. The fabric, after finishing, was attractive in appearance, pleasing



in hand characteristics, and in all respects compared favorably with worsted of the same construction. The possibilities of this development require thorough investigation. The limitation of the system is fiber length; co-operation between wool grower, top maker and spinner will make available to the mill wools better suited for this system of processing.

To spinners of staple fibers on cotton machinery the author has this to say—try the above organization, or a modification, for 100 per cent uncut short wool; then let your cost department determine the margin between the market price of worsted yarns and the cost of reproducing those yarns based on even your poorest running conditions. The figure will be an eye-opener!

### Act To Revive Japanese Woolen Industry

The War Department recently took initial steps toward restoring the Japanese wool textile industry to its pre-war level. A program, open to private dealers in the United States and other foreign countries, permits contracts to be signed by individual foreign dealers in raw wool and the Japanese government under the supervision of S. C. A. P. The War Department reports that Japanese woolen textile plants are in good shape and ready to get back into business. It estimated that woolen tops and yarns, the only manufactures envisioned in the present program, could be delivered by Japanese mills within four months after arrival of the new raw wool in Japan.

The plan as described by S. C. A. P. would work as follows: Interested private concerns would furnish raw wool to the Japanese Government on a CIF-Japan basis. The private concerns would then bill the Japanese government for the cost of the wool. This bill would then be held in abeyance until the woolen tops or yarn, which the private concern is interested in getting from Japan, had been made and delivered to a Japanese port. The prices charged for the tops and yarn would be the actual market prices quoted in the United States in bond, duty not included, on the date delivery was made to Japanese ports. The private concern would then deduct the value of raw wool invoices from the price of the tops or yarn delivered to them by the Japanese government. The difference between the raw wool cost and the cost of tops or yarn would be paid to S. C. A. P. either in the form of additional raw wool or in dollars.

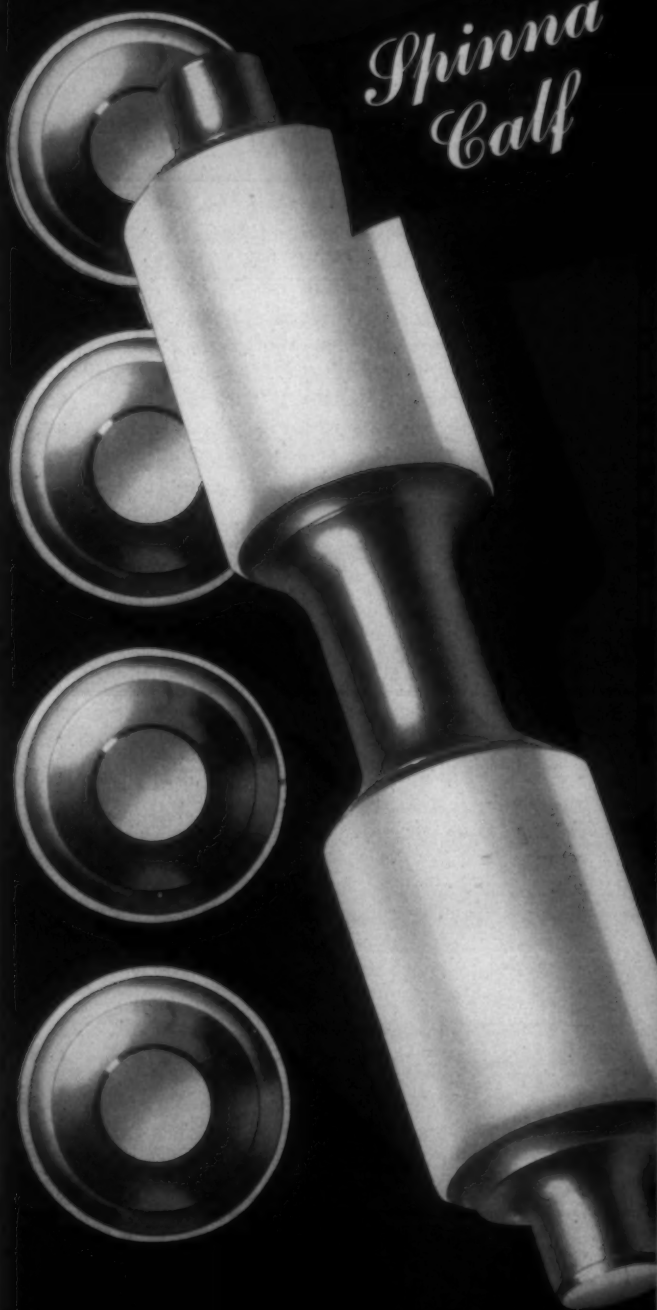
### British Woolen Industry Pushing Exports

Inspired by Prime Minister Attlee's recent statement that Britain must "stand on her own legs as soon as possible," the British wool industry's emphasis is again on exports. The industry's imports of raw material normally comes mainly from countries within the sterling area. This circumstance was one of the principal factors which led the government to permit the resumption of private trading in raw wool. The market is now open to world competition and the full trend of economic factors. Prices of the raw material have increased, however, and manufacturers in the country have had to average their buyings of raw material. On the other hand, it is reported, sales of tops or of finished cloth have had to be "married" in so far that sales in England are limited to the maximum price range and for export, limited only by their rate of production and consequent delivery and by the market price of the individual country concerned.

TOP NAME IN ROLL COVERINGS

# LAWRENCE

*Spinna  
Ball*



*It's Better Naturally*





# Training Of Supervisors At Shuford Mills

By HILL SCOGGIN, Regional Director at Charlotte, N. C., for National Foremen's Institute, Inc.

**T** ABOR legislation once again clouds the issue. Good industrial relations were not brought about by the Wagner Act. The new Taft-Hartley Law will not, in itself, bring about industrial peace. All it does is help limit coercion and abuse of labor unions.

Good industrial relations stem primarily from proper training of supervisors. Many leaders of the textile industry haven't allowed labor legislation to divert their attention from the necessity for training the overseers and second hands in the sound theory and application of good human relations. They realize that their supervisors can make or bring about industrial peace. All it does is limit coercion and abuse of labor unions.

The alert executives of the Shuford group of mills in and near Hickory, N. C.—Alex Shuford, president, William Shuford, general manager, and Calvin Moore, personnel director—foresaw many months ago that their overseers would need intensive training to help them meet the complex post-war problems of production and labor relations in their nine plants. They obtained from the National Foremen's Institute, Inc., a management training program. The institute is a management organization specializing in the training and development of supervisory personnel, with the Carolinas offices in Charlotte. General and editorial offices are in Deep River, Conn., and New York City.

Shuford Mills first started the National Foremen's Institute training program for its overseers at the Highland Cordage Plant. It produced such excellent results that the company put the program to work in its eight other plants and required every person in a supervisory capacity to take the training. The course consists of a series of 26 weekly conferences, each covering an important phase of the foreman's job. A set of 26 manuals, one for each of the 26

conference subjects, and a conference notebook were presented to each of the men enrolled.

The supervisor's conferences were begun at the Highland Cordage Plant in September, 1945, and will be completed in the last of the plants by December, 1947. Each conference is held under the direction of a conference leader. The 26 conferences cover all phases of the overseer's job, among them personnel problems, safety and good housekeeping, co-operation with other overseers, training of new workers, company policies, discipline, quality control, eliminating waste, cutting costs and numerous others.

It must be remembered that the discussions of these problems by the men themselves are as important to the success of the training as is the study of the subject matter in the manuals. In fact, it is only through such open discussions that a thorough, mutual understanding of the problems of the overseers, supervisors and production executives can be brought about.

To show conclusively that the Shuford men attending these conferences have gained much from them and believe in them, they were asked to state briefly their reactions following completion of most of the course. A few typical statements follow:

"I feel that the conferences are helping me prepare myself to meet the changing conditions that we face in the post-war competitive market and will help me get increased worker production through a better understanding of the human problems."

"I think it has been more of a school of information with an aim of getting thoroughly acquainted with each other. And that is necessary in order to have real honest and healthy co-operation between the various departments in a plant."

"In my opinion, the conferences give a foreman attending them a distinct advantage. Although the training is not a cure-all for all problems, it will have a tendency to minimize many of the problems we will face in human relations."

"I have already noticed better personal relations between foremen of this group. It has also made me realize that a foreman should manage his department as he would his own business."

According to Mr. Moore, the top executives at Shuford view such supervisory training as a production tool, as a morale builder and an effective way to show the overseers that they are a part and parcel of management. They commend it to any other management that takes a realistic up-to-the-minute attitude toward its foremen and supervisors and their problems.

Some other well known textile firms that have used this conference training program include Cramerton (N. C.) Mills; Quaker Meadows Mills at Hildebran, N. C.; Enterprise Yarn Mills, Inc., at Coleridge, N. C.; Hartsville (S. C.) Print and Dye Works; Spindale (N. C.) Mills, Inc.; Mills Mill at Greenville, S. C.; Pendleton Mfg. Co. at La France, S. C.; and Callaway Mills at LaGrange, Ga.



Calvin Moore, personnel director for Shuford Mills (seated at left of motion picture projector), is shown here with a group of overseers and second hands in conference.



# Dyeing and Finishing

## Textile Progress Accents Instrumentation

By RICHARD POLLOCK, JR., Textile Industry Engineer, Brown Instrument Co.  
A Division of Minneapolis Honeywell Regulator Co., Philadelphia, Pa.  
— Before American Association of Textile Technologists —

THE phenomenal progress attained by the textile industry over the past decade has been based to a considerable extent upon accelerated production rates with increased machine efficiency. As this evolution advances, one fact becomes more and more prominent. That fact is that manual adjustment of process variables cannot meet the accuracy and speed required for maximum process efficiency.

We have all seen strong evidence of the textile industries advancing to new high standards of product quality and operational efficiency. However, for this progress to be held, textile engineering must be focused beyond the process method and the machine. It must include careful consideration of the demand for accurate control of such process variables as temperature, steam flow, and water flow. As process methods advance, this demand becomes stronger. Erratic manual valve settings can be tolerated less and less as material throughput is expanded.

In this paper I will discuss the major process variables first from the standpoint of measurement, and then from the standpoint of application to textile processes. As the various types of the instruments are introduced, you will observe that there is one feature common to all. Each has a sensing device and a recording or indicating unit. The sensing device may be compared to a finger on the human hand, and the recording device compared to the human brain. Place the finger over a flame and the brain immediately reacts—some action must take place. Just as in the human brain, so it is with an instrument. As the instrument is informed of measured value, it acts accordingly. For example, it opens, closes or regulates the position of a valve.

### Thermometer

All of us are well aware of the important part which temperature plays in textile processing. The thermometer is fundamentally the same as the glass stem thermometer outside your kitchen window. A bulb corresponds to the glass ball at the base of the stem. As the temperature rises higher in the stem, it registers against the calibrated numerals which, in effect, correspond to the instrument itself and its scale or chart.

### Pressure Gauge and Flow Meter

Then there is the pressure controller or pressure gauge. It operates in exactly the same manner as the thermometer, except that it has no bulb and filled tubing. Instead, it is

connected by piping to the point of measurement referred to as a pressure tap. Another member of the family is the flow meter—an important one since it is the means of measuring and controlling such variables as steam flow. In the measurement of flow, the sensing device most commonly used is the orifice plate—a thin sheet of metal with a definite opening.



The orifice plate installed in the pipe line is a restriction creating an artificial pressure drop. Connections, one above and one below the orifice plate location, provide means of measuring the pressure differential. As the rate of flow increases, the added pressure forces the mercury in the left side of the U tube toward the right side. In actual practice this mercury U tube is replaced by a unit referred to as a meter body, the function of which is to interpret the pressure changes received from the flow line into electrical current. The metering or controlling instrument receiving the electrical current then indicates or records the rate of flow accordingly.

### Pyrometer

The next instrument is referred to as either a potentiometer or pyrometer. Its measuring or sensing device is known as a thermocouple. It consists of two wires of dissimilar metals which produce a tiny electrical current varying in potential with changes in temperature at the joined tip. This tiny electrical current is amplified and measured through the use of the electronic vacuum tube. Textile mill men have been quick to recognize the outstanding advantages of the electronic potentiometer—its high accuracy, rapid response, and its facility for temperature measurement of a large number of locations. The electronic potentiometer is available in many forms to meet the host of requirements encountered in the textile industries. Three outstanding forms are in use in textile mills today—(1) the circular



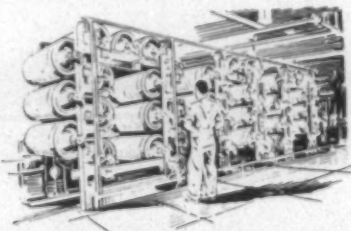
chart recording potentiometer controller, (2) the multipoint strip chart recorder, and (3) the precision indicator.

### Multipoint Recorder

The multipoint recorder will record the temperature of from two to 16 thermocouples. It prints the record just as soon as a balance is obtained facilitating frequent recording when a number of points are being measured. In the faster models, it is capable of printing a record each second. Other models record less frequently. A common practice in the use of this instrument is the recording of temperatures of machines in an entire department, each machine being separately controlled by its own instrument. For example, a boss dyer can check the temperature of any kettle in his department at one central point; in many cases it is located in his office.

### Precision Indicator

The precision indicator is a novel form of electronic temperature indicator which will indicate temperatures as fast as you can press the push-button switches which are connected to the thermocouples. The large circular scale rotates and the temperature is observed beneath the stationary hair line. The practical applications for this model are as numerous as the departments in the mill where many machines of the same type, performing the same process, are critical as to temperature.



Generally speaking, the two models just discussed contribute considerably to increasing the efficiency of mill operation, particularly as to improved product quality control. While the potentiometer is widely used for temperature measurement, this type of instrument is also used to measure other electrical changes, such as resistance, capacitance, and electromotive forces generated by sensing devices other than temperature measuring devices.

### Time-Temperature Control

In addition to the equipment described thus far, the control of textile processes in many instances involves the use of auxiliary equipment referred to as control devices. Typical of such devices is the timer which can be compared to the alarm clock which is so vital to your everyday life. Frequently, the control of an operation requires the interlocking of time and temperature. One method of accomplishing this interlocking is by utilizing a thermometer in conjunction with a timer.

Time-temperature control can also be accomplished by employing a master actuating instrument or pneumatic transmitter. In this unit is a revolving metal cam cut to the desired pattern of time and temperature. As the cam rotates, the follower pneumatically positions the control index of the thermometer which in turn regulates the control valve. In the event of a change in process schedule, the cam is replaced by one which has been cut to suit the *new* schedule.

The first application to be discussed will be the control of continuous raw stock and cloth dryers with the electronic potentiometer. In introducing you to the family of instruments, you will recall my reference to the outstanding advantages of the electronic potentiometer—its high accuracy, rapid response, and its facility for measurement of a large number of locations. The successful operation of modern textile dryers is entirely dependent upon the proper temperature gradient. Let us consider some of the common causes of faulty dryer operation—clogged filters, low steam pressure, slipping fan belts, and improperly adjusted dampers. Without a means of checking temperatures at points throughout the process area inside the dryer, you can depend only on examination of the processed product. Under this procedure, the loss column is favored with possible charges of shut-down time, the cost of spoiled stock or cloth, and the operator's and machine time involved in processing a spoiled product.

Thermocouple locations are selected according to the design of the dryer, the path of the material and of air stream. They are installed through the walls of the dryer in a well distributed measurement pattern. The most critical location in relation to the temperature gradient is selected as the control point. The potentiometer continuously receives the measurement from the control point and regulates the flow of steam to the dryer coils accordingly. The remainder of the thermocouples then serve as check points by manual operation of a multipoint switch. The important advantage of this multipoint measurement is the ability to check the common causes of faulty dryer operation which I have outlined. The operator can, at will, merely turn a switch and secure an immediate reading of temperatures at all points in the dryer and recognize trouble at once and just where the correction is needed. The important advantage realized from the entire system is increased dryer production with added efficiency. To cite an example, one dye house has experienced an increase of 20 per cent in dryer production with considerably improved efficiency through automatic temperature control with an electronic potentiometer. In this instance, the machine is a festoon cloth dryer.

Since the inception of textile dyeing, mill men have, in effect, accepted lot-to-lot shade variation as a necessary evil. Such is no longer the case, for dyeing is one of the important sectors of the advancing textile front. Textile technologists have combined efforts with machine and chemical manufacturers. New machine designs and new process methods, automatically controlled, have resulted in reduced dye lot problems to a minimum approaching elimination.

### Batch Dyeing Control

The interlocking of time and temperature is of prominent importance in dyeing control. A typical control arrangement for batch dyeing employs a cam operated transmitter which positions the control index of the thermometer. The predetermined process cycle is cut on the metal cam and lot after lot is dyed to precisely the same pattern of time and temperature. Utilizing the timer as the actuating device is recognized as the more compact and flexible means of automatic control of dyeing time and temperature, particularly in package and beam dyeing.

The timer actuated control system is applicable to dyeing as well as size cooking. The operator sets the controls on the panel to the predetermined dye cycle settings, then



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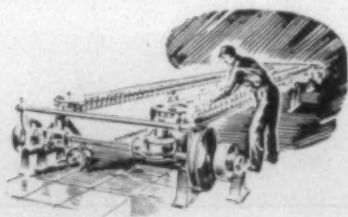
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An addition to Du Pont's line of "Chromacyl" colors . . . particularly well suited for application to woolens and worsteds, either in self shades or in combination for suitings, bathing suits, sportswear, and rugs. Extremely level dyeing, "Chromacyl" Pink B possesses very good fastness to dry cleaning and perspiration . . . good resistance to washing and light.

E. I. du Pont de Nemours & Co. (Inc.), Dyestuffs Division, Wilmington 98, Delaware



pushes the "start" button. The system thereupon takes over the control of the entire process indicating its progress in stages by a series of signal lights. When the "end" light is lit, the operator pushes the stop button which automatically resets the system for the next batch with exactly the same time and temperature conditions.



Textile engineers are becoming increasingly cognizant of the importance of the measurement and control of pH as a means of reducing production costs, improving product quality, and decreasing rejects and waste. Automatic industrial pH control became a practical reality a few years ago with the design and development of components sufficiently rugged to withstand production or process conditions. Thus evolved a reliable and accurate system, the delicate laboratory-type equipment associated with pH equipment for so many years having been replaced by components designed specifically for industrial use.

In pH control, the sensing device is an electrode assembly, either of two types—one for immersion in the bath or storage tank, and the other for installation in the liquor flow line. The electrode assembly generates an e.m.f. which is amplified and transmitted to the electronic potentiometer. According to the potential it receives, the electronic potentiometer positions the diaphragm valve which modulates the flow of corrective agent to the process.

### Continuous Bleaching

Instrumentation was recognized as a requisite for successful operation of continuous bleaching shortly after its inception, for here is cloth traveling from stage to stage at speeds approximating 200 yards per minute. At such processing rates, temperatures must be continuously correct and all variables automatically controlled with rapid action and close precision. Instrumentation is furthermore a factor vital to realize the economies in steam, water, chemicals, and labor which this process method affords.

For example, a complete range without automatic control would require a minimum of six operators introducing the human element of miscalculating process needs and intermittent valve adjustments. By comparison, a range with complete instrumentation is capably handled by two operators. Ten or more steam and water valves are constantly being regulated.

Instrumentation for continuous bleaching is arranged in three groups—the washer, the saturator, and the J-box or storage box. Each has its individual control system. I will briefly discuss each phase separately.

First of all, the steam used by the entire range is metered and totaled by a recording flow meter—the watch-dog of operation economy and a basis for steam accounting. Even under the most efficient conditions, the washers are one of the largest consumers of steam in the bleachery. Tests have proven that for the same washer, handling identical cloth, at a constant speed, on manual control, varying amounts of

water will be consumed from day to day. This condition is not too difficult to understand if one considers the fact that the operator, when going on shift, will naturally tend to regulate the water valve so as to provide an excess flow of water to compensate for any fluctuations in the supply. The operator, of course, concerns himself with only the reproduction of properly bleached cloth and does not, therefore, feel that he should be concerned with the amount of steam used to heat the water to the operating temperature.

However, assuming that it is desired to heat 100 g.p.m. of make-up water from a temperature of 50° F. to operating temperature of 140° F., approximately 4,650 pounds of saturated steam per hour will be required. If an operator adjusts the water regulating valve to a point where 110 g.p.m. are supplied to the washer, approximately 5,100 pounds of steam will be required, representing about ten per cent steam waste. This ten per cent represents a considerable portion of the savings that may be achieved by automatic control of washer water flow.

Economic operation of the washers in a bleaching range depends a great deal on the assumption that water temperature will be relatively constant. Without control, if the temperature rises above that *desired* for bleaching, excessive steam consumption will be the result; if the temperature drops below the correct process temperature, the quality of the bleach will be adversely affected.

Having the need for temperature control, it now becomes important for us to consider the control characteristics required. Because the cloth remains in the washer only a short time, the most important characteristic will of necessity become the ability of the control device to recognize the correct instantaneously minute deviations from bleaching temperature. Even the small measuring lag of the thermometer does not meet the needs of the operation. We, therefore, have taken advantage of the speedy response available in the ElectroniK potentiometer, with the sensitivity of a small specially designed thermocouple.

In the control of saturator bath temperature, as in the washers, we must face the problems of small capacity and high speed operation. The cloth travels so rapidly through the saturators that temperature variations are reflected almost immediately in the emerging cloth. Inasmuch as the temperature of the cloth leaving the saturator directly influences the amount of steam required by the J-box or steamer, this stage requires the maximum in sensitivity and high-speed control action.

In addition to our other saturator problems, we must, in the peroxide saturator, consider the fact that elevated temperatures will cause the peroxide to decompose, adding the cost of waste chemicals to our already considerable cost of operation. The arrangement of the equipment for temperature control of the saturators is therefore similar in many respects to those for the washers. Each saturator is equipped with an electronic potentiometer.

In order to maintain the level of solution, a liquid level controller is utilized on each saturator. The small capacity of the saturators and the rate of cloth speed necessitates automatic and continuous regulation of level. The basic function of a bleaching range, of course, is to produce uniformly bleached cloth at the highest rate of speed consistent with good mill practice. The speed of the cloth as it enters the J-box in both the caustic and peroxide sections is of the utmost importance for successful operation.

The basis for speed settings is the ratio of the weight of



THIS IS NO. 64 OF A SERIES ON

# GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation



## WHERE TO LOCATE THE SUPPLY (Roto-Coner\*)

The two important factors in the proper location of the supply on the Roto-Coner\* are direction and distance.

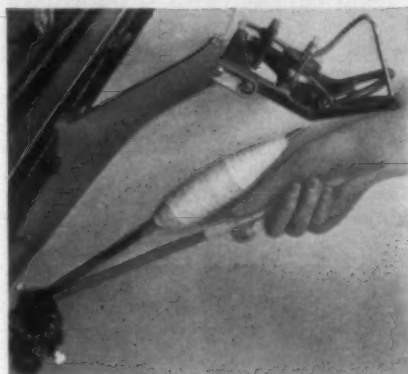


Fig. 1 Tilting Supply Spindle

The axis of the supply—whether bobbin, spool or wound package—should be in line with the delivery point on the tension bracket. With a package supply, it is not too important to be exact, but when fine yarn is being wound from bobbins or cops, this is one of the most important settings on the machine. If excessive end breakage develops on one spindle, the alignment of the supply should be one of the first things checked. All spindles should be examined periodically, which is easily done by sighting along the line of bobbins; if one is out of line, it can be detected at once.

The distance from supply to tension is nearly as important. Experimenting will show the best setting, since sometimes the supply should be as far away as possible, but generally it is set close. A close-set supply runs off smoothly as long as there is a single balloon of the yarn; but when the single balloon changes to double, there is sometimes trouble. A mule cop usually has to be so close to the tension that the full cop cannot be placed on the standard fixed supply spindle. In that case, the tilting supply is used: while the yarn is running, a spring holds the spindle in position close to the ten-

sion; while donning and doffing, the spindle is easily tilted forward so that the cop will clear. Once the proper setting is established, all spindles should be set uniformly.



## DIFFERENTIAL TENSION AND PRESSURE ADJUSTMENT WITH CREEL SUPPLY

(No. 50 Winding Machine)

The Creel Supply is used on the No. 50 when a number of ends are folded in winding a package to be used as a supply for covering wire or rubber.

With the Creel tension, there is no provision for releasing tension as the yarn speed increases in response to the increase in package diameter. With a "dead" yarn or where the increase in diameter is not great, this is not a serious problem, but in all other cases, the lack of tension release will cause the package to bulge badly.

The use of the Two Rod Differential Attachment corrects this condition.

The device consists primarily of three parallel rods. The center rod is fixed in two brackets. The bottom rod, which is free to turn in the same brackets, supports the brackets that hold the top rod. By means of a linkage from the Traverse Frame Counterweight to the bottom rod, the top rod moves outward as the package builds up.

Actually, this attachment serves as another tension, because the contact of the yarn with the rods creates tension. The yarn passes over and behind the top rod, in front of and under the middle rod,

and thence to the breakage levers. As the upper rod moves outward, the amount of contact can be reduced from  $216^\circ$  to  $23^\circ$ . Thus a differential tension control is provided.

But tension is not the whole answer. Good winding is the result of a satisfactory combination of tension and pressure. The Two Rod Differential Attachment, while solving the tension problem, makes the standard differential pressure arrangement ineffectual due to the counter pressure effect of the rods.

In order to create differential pressure in keeping with the tension, the arrangement from the No. 6C machine was adapted for use on the No. 50. While the Two Rod Attachment causes the tension to vary inversely with the yarn speed, the 6C Pressure Attachment, working independently, releases the pressure differently. The release is rapid at first, but gradually slows down as the winding progresses. The result is a firm foundation for the package, and the release of pressure prevents the outer layers of yarn from pushing out the inner layers.

Applying the attachment to the machine involves only the drilling and tapping of one hole in the frame. The two attachments are applicable only to machines having fewer than six spindles.



Fig. 2 Heavy Differential Pressure Attachment adapted from No. 6C for No. 50 Machine, and Two Rod Differential Tension Attachment.

See our Catalog in TEXTILE WORLD YEARBOOK

\*Reg. U. S. Pat. Off. July, 1947

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# UNIVERSAL WINDING COMPANY

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the cloth to its speed. We therefore install an indicating tachometer at each saturator to enable the range operator to observe the speed at each location prior to cloth entrance into the J-box and to make such range speed adjustments as are necessary. This phase of bleaching is of prime importance where the construction of the cloth processed varies widely or at frequent intervals.

Assuming that the other preceding operations of the bleaching process have been properly executed, the successful operation of the range now depends almost entirely on the maintenance of the proper storage temperature of the cloth during causticizing and bleaching. The first purpose to be accomplished is the ability to accurately check the temperatures *inside the J-box* at well distributed measurement points. Again we meet the facility of the electronic potentiometer for such requirements. Three thermocouples are installed through the wall of the box from which a reading is secured through operation of a switch. The uppermost of these points is the control point and is so located that the flow of steam is regulated according to the temperature of the entering cloth.

Correct squeeze roll pressure is an important factor in the successful and economical operation of the range. Pneumatic roll loading is normally employed because of ease and flexibility of adjustment. Upon leaving the washer, cloth must have its moisture lowered sufficiently to insure an absorption of approximately its own weight of solution as it passes through the saturators. Proper roll loading also reduces to a minimum the dilution of saturator solutions by carry-over liquids from the preceding step in the process, and by the cloth carrying away an excess of solution as it leaves the saturator.

A special control station is installed at each washer and saturator, enabling operators to observe the squeeze roll pressure on a dial-type indicator. Operation of a transfer valve provides any remote roll loading adjustments necessary. In the event that a record of squeeze roll loading is desired, a two-pen recording pressure gauge is added, mounted on the central control panel, each pen providing a permanent record for each set of rolls.

With the exception of the pneumatic squeeze roll loading stations, the instruments and control equipment for a continuous bleaching range are installed at a central point in a completely enclosed panel housing. At the end of a day's production, this central station yields data of immeasurable value for reproducing proper bleach quality, for analyzing the efficiency of operation, and for checking operation cost.

### Lower Steam Consumption

What does this mean to the mill man? Just one factor, I am sure, will establish conclusive evidence of the vast economies that can be realized. That factor is steam consumption. The chart sections shown here were taken from one of the nation's largest mills who have realized the economy shown. With automatic control on J-boxes only, the range used an average of 7,750 pounds per hour—adding washer water flow and temperature control usage dropped to 7,730 pounds per hour—and with complete instrumentation the steam consumption is *slashed* to 4,450 pounds per hour, a saving of \$36 per day, or \$13,140 per year on one range! The equipment for this application bears a cost of \$8,000—which, of course, means that before the second year of operation, the equipment is completely amortized and these steam savings become *net!*

In conclusion, I wish to emphasize the fact that the advantages to be gained through instrumentation are by no means confined to the processes I have described. Economies of the same proportions are realized in the completely automatic control of continuous dyeing, decatizing, and a score of others.

That which I have outlined to you is our conception of textile instrumentation as of this hour. It contains only a hint of our tomorrow. For the tomorrow, with all its economic problems, will bring you face to face with one prominent question. That question will be, "How can we compete not only with one another, but with new commodities which will channel the consumer dollar into other quarters?" It is our belief and conviction that electronic and other automatic controls will play a major role in providing the textile industries with the means to produce higher quality goods, faster and more cheaply. This in the final analysis is the heart of American free enterprise.

### A Standard For Certification Procedures

A new American Standard yardstick to judge the fairness and adequacy of any system for certifying or approving merchandise is described by Dr. Bernard L. Oser in the July issue of *Industrial Standardization*.

Dr. Oser is chairman of the American Standards Association group dealing with principles underlying valid certification and labeling of commodities, known as Committee Z34, which prepared the new American Standard Practice for Certification Procedures.

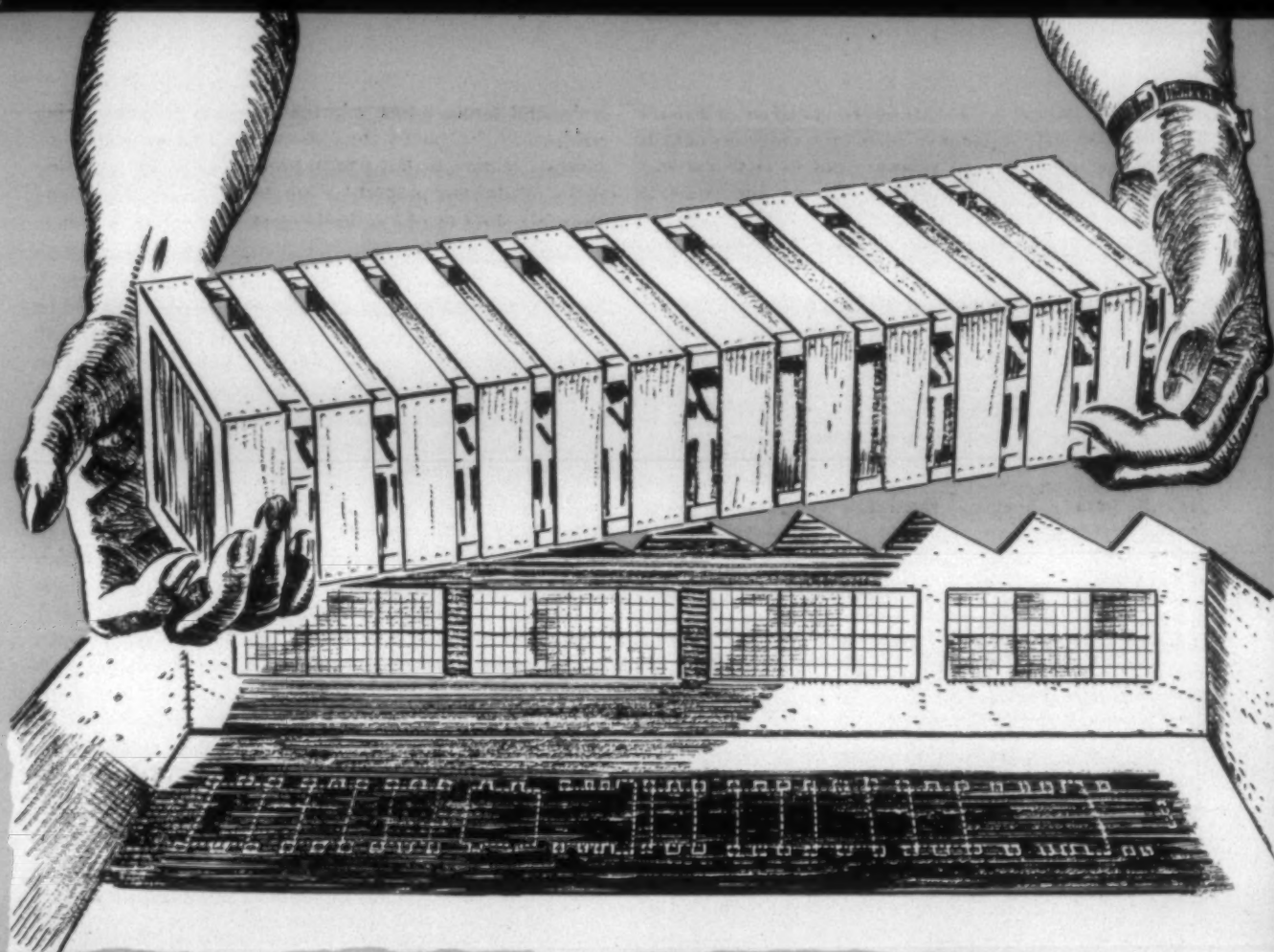
Dr. Oser says in his article that the public in general has had no means of differentiating between the labels which were of important significance and those that were merely the figment of a publicist's active imagination, or between certifications that truly attested to value and those that were meaningless or had been sold for a fee without regard to the real merits of the product.

*Industrial Standardization* reproduces four important labels which show the nature of tested products which it calls "a few of the well-known authoritative certification labels." These include the labels of United States Testing Co., the American Gas Association, the American Institute of Laundering and the Electrical Testing Laboratories.

"The new American Standard Practice for Certification Procedures," Dr. Oser says, "is in the nature of a categorical statement of the general principles that should underline a certification program that the public may regard as valid. The standard covers a wide field. It is based mainly on the principle that every step leading to the certification of a product must be openly arrived at. Any organizations carrying out the functions of certification must under this procedure make public their qualifications and their responsibilities. To be accepted as valid any certification program, including the sampling of the product and the examination on which the certification is based, must be re-examined at appropriate intervals.

"Only qualified trade associations, testing laboratories, professional societies, or other recognized organizations should be recognized as being properly responsible for valid certification programs. The board of directors of the American Standards Association is considering the question of further A. S. A. participation in solving the problems of certification in informative labeling," Dr. Oser says.





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## Wages Are High Enough

The C. I. O. professionals recently began a repetition of the game which they have worked several times.

They jumped on a group of New England mills where most of the managers are weak kneed and gutless and forced another wage advance.

Many managers of the New England mills have shown, time and time again, that they have about as much backbone as a jelly fish and they throw up their hands every time a C. I. O. racketeer points a finger at them.

The managers of New England mills two generations ago were fine and sturdy men and they developed a strong and profitable textile industry.

They sent their sons and grandsons to Harvard and Yale and it is unfortunately true that many of them became social minded and weak and when the mills come into their hands seem to look upon them entirely from the standpoint of the dividends which can be secured.

As the installation of new machinery and modern processes would cost money and temporarily reduce dividends, they continued to operate the old machines until depression periods brought heavy losses and liquidation.

As proof of our assertions we cite the fact that 21,000,000 New England cotton spindles in 1923 have dwindled to about 4,600,000 and many of those remaining are not now in operation.

Among those who operate the remaining cotton mills, there are comparatively few who seem to have ability or who do not seem to be primarily interested in dividends.

Several weeks ago the C. I. O. racketeers said "boo" at them and rather than suffer a period of idleness, which meant some loss of dividends, they immediately yielded to

a demand for an advance in the already high wages being paid.

Most of the remaining New England mills are operating upon fabrics and specialties not made in the South and therefore there can be no real comparison of wage rates.

Leaving their New England victims still quivering with fear, the C. I. O. racketeers turned to the South and began to shout that there was a wage differential which should be eliminated.

They had created a wage differential if no consideration is given to the fact that entirely different fabrics are made and if the advance in wages in a small group of New England mills had not been for the specific and definite purpose of creating a differential.

It was the same game which had been worked several times in the past few years.

The C. I. O., having established the New England differential, is now moving in upon several groups of Southern mills, but we hope that our mills will have enough backbone to resist even to the point of allowing their mills to remain idle during a strike, because textile wages are high enough and further advances will hasten the day which will bring distress to the mills and suffering to employees.

Mill employees are now receiving wages far above any they ever expected to receive and should realize that greed usually leads to distress.

The following extracts from the *New York Times* should be considered by employees as a warning:

New York, Aug. 2.—Some evidence of buyer resistance to further price advances developed in the cotton textile market during the past week.

New York, Aug. 8.—Buyers shopped around for goods, but were looking for lower prices, so the volume of business was small.

The 80 square print cloth which recently sold at 34 cents a yard on a spot basis, sold down to 33 cents and 32½ cents a yard.

Another newspaper extract says:

The Georgia and Texas agriculture commissioners challenged C. I. O. Emil Rieve's statement that labor may have to press for higher pay. High wages for labor, they said in a statement issued through the Association of Southern Commissioners of Agriculture, are the big factor in high food costs.

W. O. Swanson, president of the National Association of Retail Clothiers and Furnishers, urged the mills to reconsider "all the elements involved" in an attempt to keep prices of men's suits from rising next spring.

An A. F. of L. statement says:

1. President Truman's mid-year economic report forecast an increase of \$5 billion in the annual rate of national production during the second half of 1947.

2. If this increase is not bought, "more than a million jobs will probably be lost."

3. Exports are beginning to decline and the nation must depend even more on consumer buying. Can consumers increase their buying enough to save a million jobs?

The increased buying power may come from cashing of veterans' terminal leave bonds and from relaxation of Federal controls on installment buying due by Nov. 1.

This may serve as a shot in the arm to maintain demand, but is no foundation for sustained prosperity.

How can "full employment" be long maintained while rising prices cut off buying power?

Realizing the disaster which is almost certain to come, Attorney General Tom Clark has declared a war on high prices and begun an investigation.

The employees of Southern textile mills will at some time, possibly in the not very distant future, look back upon



the wages of today, or possibly any wages, with a longing to have them again.

Wages are high and the employees of the textile mills of the South should think well before they act greedy and by their actions force prices still higher.

When they contemplate going upon a strike in order to force wage advances they should consider the days which are to come when the deflation period has made it impossible to obtain jobs and a pay envelope.

There are enough idle days ahead for all in the textile industry without trying to force idleness now.

Emil Rieve, George Baldanzi, William Smith and others feel that strikes for higher wages will increase the payment of dues to their organization.

They have nothing to lose as the result of a strike, because their salaries will be paid out of funds already collected.

The fictitious New England wage differential has been created as it has always been created by simply snapping fingers at the weak kneed managers of the textile specialty mills of that section.

George Baldanzi and his gang, having established the alleged differential, are now shouting about it and trying to move in on certain Southern mills.

Textile wages are high enough and there should be no yielding upon the part of those mills which have been selected because they signed union contracts.

Any further advance in textile wages will mean higher prices for textile goods at a time when the public is becoming very much aware of the highness of prices and even the attorney general is becoming alarmed over high prices for all types of goods.

It will be far better to allow Baldanzi and Smith to order employees to strike and to remain idle and without wages for several months than to yield to the coming demands which will force prices of textile goods still higher and head the industry for disaster.

We hope that there will not be many weak knees in the South.

## **Smut On Their Faces**

We ran across a peculiar item in last month's news which warrants a little discussion. It was reported that boarders in some seamless hosiery mills at High Point, N. C., making up Local 65 of the United Textile Workers of America, voted to secede from the textile union and affiliate with the United Construction Workers of America, a branch of the United Mine Workers. The last-mentioned outfit, as everyone knows, is old John L. himself.

Our first impression is that construction work is somewhat foreign to hosiery boarding, but we guess that the High Point union members had a good reason for the change. There might be a little closer connection between the boarders and John L. if, say, members of the High Point local were handling seamless nylons; union logic then would indicate that the tie-up is a natural, for isn't coal a component of nylon? However, we will concede that some of the hosiery at least has nylon-reinforced toes, so welcome Mr. Eyebrows!

If you won't bite on the above explanation, then consider something else. Our guess is that one Grady Morton, former international representative of the textile union in the

High Point area, arranged the switch in affiliation so that Grady Morton would have some job insurance. It's a sad fact, but it seems that union leaders always have to be stirring up trouble in order to remain in the good graces of their members. Grady Morton likely ran out of complaints, then quickly had to think up some means to hold his crowd together. He smeared a little smut on his face and told Local 65 that the coal miners got wage raises every six months or so. Thus, Grady probably pleaded, let's join up with the coal miners. Maybe the deal makes sense to members of Local 65, but it looks pretty foolish to us.

## **Joe Sirrine**

The death of J. E. Sirrine of Greenville, S. C., president of J. E. Sirrine & Co., marked the passing of a man who played a prominent part in the development of the textile industry of the South.

Not only did he, and the engineering firm which he developed, have a part in the design and construction of many of the best mills in the South, but his advice was constantly being sought upon textile problems entirely aside from engineering.

Joe Sirrine liked people and people not only liked him but had confidence in his integrity and his judgment.

As an expression of their high regard the textile manufacturers of South Carolina, when they set up a foundation through which to provide improved textile education for the young men of their state, named it the J. E. Sirrine Textile Foundation.

Joe Sirrine lived a busy and useful life and he will be sadly missed by the textile industry.

## **Then And Now**

When the Wagner Law was enacted, with its many provisions which were unfair to employers, the leaders of organized labor severely criticized those employers who presumed to criticize or condemn any of its provisions.

They charged that, because it was the law, employees should accept it and refrain from criticism.

Now that a new law has been enacted for the purpose of giving equal treatment to both employers and labor, we note the following:

Washington, July 16.—Gerhard P. Van Arkel, resigned general counsel of the National Labor Relations Board, predicted tonight that unions would "boycott" the board and many employers would devise ways to by-pass the new Taft-Hartley labor act.

They who only a few months ago were berating those employers who dared to express opinions relative to the unfair provisions of the Wagner Law, now openly express defiance of the Taft-Hartley Law which is just as much an act of Congress.

A poll taken just before the enactment of the Taft-Hartley Law showed that almost half of those who carried union cards felt that because of its unfairness, the Wagner Act should be amended and approved legislation similar to the recently enacted law.

The rank and file of union members feel that labor laws should be fair to both sides, but the labor leaders know that the Taft-Hartley Law will put a curb upon their racket and let union members know what high salaries they receive.



# MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

CLINTON, S. C.—Lydia Cotton Mills recently opened a library as part of its recreation program. The library currently contains 300 books with a monthly turn-over of 40 on hand.

ELIZABETHTON, TENN.—The Office of Alien Property in Washington announced recently that the government intends to sell North American Rayon Corp. and American Bemberg Corp., in Elizabethton, "as expeditiously as possible." The local rayon plants, recently taken over by the Office of Alien Property and divested of foreign control, will be offered to American bidders by public sale.

NORTHPORT, ALA.—Upchurch Mfg. Co. with 689 roving frame spindles is now being operated on rug yarns. Vernon Upchurch is proprietor.

GREENWOOD, S. C.—A memorial dedicated to 850 employees of Mathews Mill who served in World War II, 21 of whom lost their lives, was unveiled at a ceremony Aug. 10.

FORT WORTH, TEX.—The 99-year-old Conestogo Cotton Mill at Lancaster, Pa., is being closed down and the plant will be moved to Fort Worth. Horvath Mills, Inc., of New York City, parent firm, said the move was being made for economy reasons and to be closer to raw material sources.

NEWBERRY, S. C.—Contracts have been made by Newberry Textile Mills, formerly Newberry Cotton Mills, for the sale of 220 houses valued at approximately \$450,000. M. M. Clairmont, mill president, gave the churches to residents of the village and sold the parsonages at half of the appraised prices.

BIRMINGHAM, ALA.—Palmer Mills, Inc., have closed and cotton is being run out of the machinery. A New York financial concern has placed seals upon most of the machines and it is reported that they will be shipped to China. During the war this machinery was reported sold to Chinese interests but the government would not permit the machinery to be shipped.

LOWELL, N. C.—National Weaving Co. is constructing a one-story addition to its plant here to house new high-speed warping and slashing machinery. The mill, a unit of Beaunit Mills, Inc., produces rayon fabrics.

CHARLOTTE, N. C.—The No. 3 Plant of Textron Southern, Inc., known as the Calvine Mill, has been sold to Leading Embroidery Co. of North Bergen, N. J. New owners will take possession of the 637-loom, 23,840-spindle plant Jan. 1. Last year Leading Embroidery purchased Cowpens (S. C.) Mfg. Co.

HICKORY, N. C.—A contract has been awarded for a \$125,000 addition to Ivey Weavers, Inc., here which will increase the floor space of the plant by about 30,000 square feet. The firm produces sateens, twills and pongees.

SAN ANTONIO, TEX.—Arthur Tinker, vice-president of Esmond Mills, on a recent business trip here, stated that he would check the Southwestern wool-producing area for a possible site for an additional blanket mill. Esmond has mills in three Eastern states and in Canada.

COLUMBUS, GA.—Eagle & Phenix Mills, Columbus' oldest textile mill, was sold Aug. 4 to Reeves Brothers, Inc., of New York, for an undisclosed sum. The firm will be known as Fairforest Co., Eagle & Phenix Division. D. Abbott Turner will resign as president but other officials will hold their positions, it was reported.

RALEIGH, N. C.—An order approving a petition of trustees of Diana Mills, Inc., and authorizing a factoring agreement with the Crompton-Richmond Co., Inc., of New York, was signed Aug. 7 in Federal Court here. The order is another legal step in reorganization of Diana Mills, Inc., cotton yarn manufacturing firm with a plant at Falls of Neuse in Wake County, under the Bankruptcy Act.

CHERAW, S. C.—Cheraw Weaving Mills, Inc., which will manufacture rayon print cloth, recently purchased a building here which was started under construction last year for Aldon Rug Co. The building will have to be completed and machinery installed before operations can begin. The mill will employ approximately 200 persons after all equipment has been installed and in operation.

DUBLIN, GA.—The first delivery of machinery to be used at the new \$6,000,000 Dublin Woolen Mills, now under construction, arrived recently. The machinery will be used in connection with the proposed training program which will begin soon.

ALBANY, GA.—Excavation for the Clark Thread Co. spool mill has been started near Albany and is well under way. The plant is expected to be ready for operation during October. The spool mill will be adjacent to the new thread mill which is now being built. The plant will cover about 6,000 square feet of floor space. Lumber storage sheds will cover about 18,000 square feet. The spool mill will also include a sawmill unit. The spool mill, which is being erected at a cost of about \$500,000, will use about \$675,000 worth of southwest Georgia tupelo per week. On a one-shift schedule, the weekly payroll will be about \$5,000 per week for 75 employees, and plans are for eventual inauguration of a three-shift schedule. Twelve spool-making machines will be used to process about 1,500,000 board feet of lumber per shift per day.

MCADENVILLE, N. C.—The United States Testing Co. of Hoboken, N. J., has installed a quality control and testing laboratory in the plants of Stowe Cotton Mills and Pharr Worsted Mills, Inc., here. The laboratory will be under the direction of Scott Whitcher of Charlotte, who has been appointed Southern representative for U. S. Testing Co.



## S U C C E S S

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Chain Traverse Grinders  
Adjustable Wheel Screw Traverse Grinders  
Burnishing and Stripper Rollers  
Strickle or Saddle Grinders

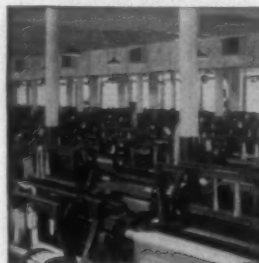
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## Parks-Cramer Company

**Fitchburg, Mass.**

Charlotte, N. C.



## PERSONAL NEWS

W. H. Gibson, Jr., formerly general superintendent of Martha Mills at Thomaston, Ga., is now president and treasurer of Gibson Yarn & Weave Mills, Inc., Dallas, N. C.

Ward H. Bushee, formerly with American Yarn & Processing Co., Mount Holly, N. C., has been appointed chief of the Cotton Spinning Unit, S. C. A. P., in Tokyo, Japan, and is now in Japan where he has assumed his new duties. He expects to remain in Japan the next two years.

C. C. Callaway, Jr., treasurer of Crystal Springs Bleachery, Inc., Chickamauga, Ga., has been elected vice-president of the Chattanooga (Tenn.) Control of the Controllers Institute of America. . . . M. W. Morris, assistant treasurer of E-Z Mills, Inc., Cartersville, Ga., was named a director. . . . The following executives from the textile industry were elected a director of local controls of the institute in their respective cities: Edgar K. Fitch, treasurer of Mount Vernon-Woodberry Mills, Inc., Baltimore, Md.; Edward C. Hunt, West Point Mfg. Co., Boston, Mass.

Joseph Leeming, publicity manager of American Viscose Corp. and editor of the company's house magazine, *Avisco News*, has resigned to become vice-president of Capital Goods and Commodities Corp., an importing and exporting firm. Margaret Gleason, assistant editor of *Avisco News* since March, 1942, has been appointed editor of the monthly publication. . . . Joseph A. Truitt has been appointed head of the mechanical development branch of the textile research department of American Viscose at Marcus Hook, Pa., succeeding Frederick C. Wedler, resigned. Mary C. Boyer is succeeding Mr. Truitt in his former position as head of the educational branch of the department.

William G. Day of Cowpens, S. C., a graduate of Clemson College, has been appointed head instructor of the weaving and designing department of the North Carolina Vocational Textile School at Belmont, N. C.

Julian K. Morrison of Rome, Ga., president of Brighton Mills, Inc., Shannon, Ga., has been appointed by Gov. M. E. Thompson to serve on the planning board of the State Agriculture and Industrial Development Board.

John M. Reeves will head the Eagle & Phenix Division of Fairforest Co. as president, and Frank Bradley, nephew of the late W. C. Bradley, will serve as general manager and vice-president. Mr. Reeves is presi-

dent of Reeves Brothers, Inc., New York, which purchased the Eagle & Phenix plant Aug. 4.

Sam F. Henry recently was named by the Fuller Brush Co., Hartford, Conn., as industrial representative for the textile industry in North and South Carolina. Mr. Henry's office is located at 212 Johnston Building, Charlotte, N. C.

E. H. Brown has resigned as general manager and assistant treasurer of Carolina Mills, Inc., at Dillon, S. C., after 23 years service with the mill. For a short while Mr. Brown will serve the mill in an advisory capacity, after which he will devote his time to his own interests.

Robert A. McCraney, formerly superintendent, has been named general manager of Quitman (Ga.) Mills, succeeding R. D. Sanders, who resigned due to the press of his duties as secretary and sales manager of the Morgan Cotton Mills plant at Laurel Hill, N. C.

Joe C. Cobb, for the past few years assistant general superintendent of the Columbia (S. C.) Division of Pacific Mills, has been promoted to the position of general superintendent of the firm's subsidiary, Rhodhiss (N. C.) Cotton Mills Co. Mr. Cobb is a past president of the Southern Textile Association.

Dr. H. B. H. Cooper has been named an assistant manager of the development department, Calco Chemical Division, American Cyanamid Co., Bound Brook, N. J. Dr. Cooper, prior to his present appointment, held the position of divisional engineer of the rubber chemicals, pharmaceuticals and coal tar products refining divisions.

Frank M. Higgins recently has been appointed manager of the Reeves Pulley Co. branch office in Atlanta, Ga., located at 990 Gordon Street, S.W. Mr. Higgins has been directly associated with the design and installation of Reeves variable speed equipment for the past 14 years, spending a number of years as assistant to the chief engineer and the last three years as a sales engineer working out of the home office in Columbus, Ind.

A memorial to the late C. W. Coleman, who served as welfare and education director of Callaway Mills, LaGrange, Ga., from 1916 to 1938 and as a member of the LaGrange Board of Education from 1929 until his death last year, will take the form of a library to be called the C. W. Coleman

Library. Funds for building and equipping the library have been contributed by Callaway Institute, Inc., through unanimous action of the institute's board of trustees.

Howard Veit of Peeble Beach, Cal., has been appointed chief of the textile branch of the Office of Military Government for Germany, U. S. zone. Mr. Veit retired in 1940 as executive vice-president of M. Lowenstein & Sons, Inc., New York, and as vice-president of Rock Hill (S. C.) Printing & Finishing Co., after 36 years in the textile industry.

L. C. Finney has been appointed superintendent of Safie Mfg. Co. at Rockingham, N. C. Before joining Safie, Mr. Finney was associated with a mill at Cowpens, S. C. Lester Adcock, cloth room overseer at Safie, has been promoted to assistant superintendent.

J. Q. Dougherty, former industrial relations director for Scripto, Inc., Atlanta, Ga., has become public and industrial relations director for Enka Corp. at Asheville, N. C.

Earl L. Clifford has resigned as manager of Uncas Finishing Corp. at Mechanicsville, Conn., and announces that he has become general manager of Sumter (S. C.) Textile Mills, Inc.

Edgar Andrews, sales engineer, recently was assigned to the Atlanta, Ga., offices of Brown Instrument Co., a division of Minneapolis-Honeywell Regulator Co. Mr. Andrews, a graduate engineer, recently completed a post-graduate course at the Brown School of Instrumentation at Philadelphia, Pa.

William Esslinger has been promoted to the position of assistant superintendent of Huntsville (Ala.) Mfg. Co., a M. Lowenstein & Sons subsidiary.

Elgin S. Nickerson has been appointed general manager of the fabrics and finishes department of E. I. du Pont de Nemours & Co., Wilmington, Del., succeeding J. Warren Kinsman, who recently became a vice-president and member of the company's executive committee. Other management changes, effective Aug. 1, follow: Dr. H. H. Hopkins, formerly manager of the finishes division, named to succeed Mr. Nickerson as assistant general manager of the fabrics and finishes department. . . . Matt Denning, formerly assistant manager, named manager of the finishes division. . . . M. A. Dibble, formerly assistant director of production, appointed assistant manager, succeeding Mr.



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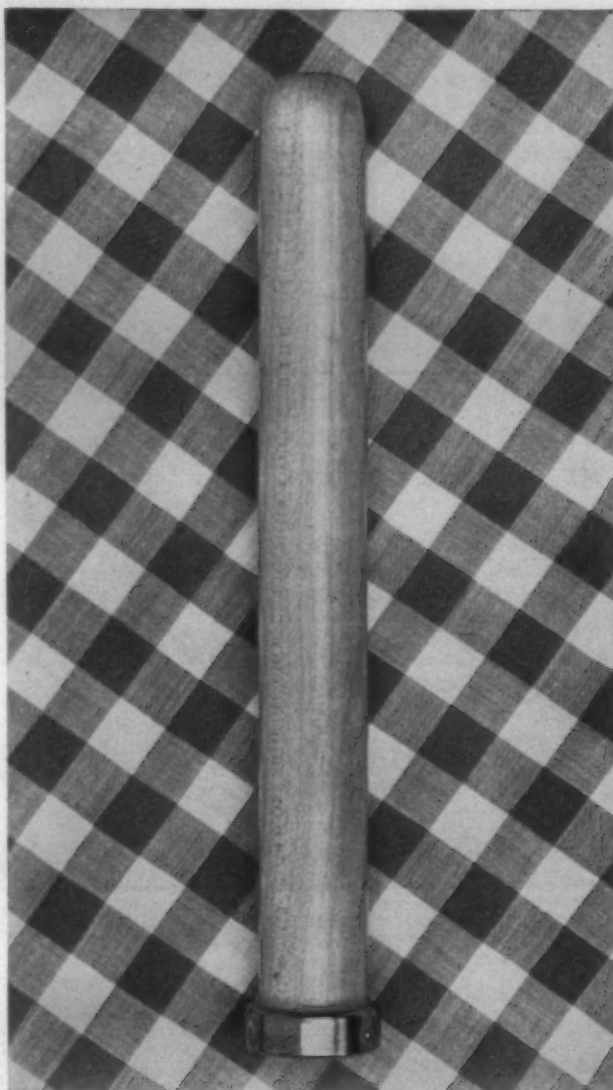
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NASHUA, NEW HAMPSHIRE  
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Denning. . . In the acetate division of the company H. K. Ryan, Jr., a technical textile specialist for 24 years, has been made manager of the fabric development section. Mr. Ryan succeeds Carl I. Taber, who was recently transferred to the nylon division.

## OBITUARY

**Joseph E. Surrine**, 74, senior partner in J. E. Surrine & Co., engineers, and a leading figure in the development of the textile industry in the South, died Aug. 7 at his home in Greenville, S. C. He had been in declining health for three years. The Surrine firm has handled work for nearly every textile manufacturing plant in the Southeast and many in New England. The firm ranked among the highest in the nation in the cotton textile and pulp paper engineering fields, and has done much work on power plants, water supply systems, knitting mills, tobacco plants and aluminum plants.

Mr. Surrine's business interests were diversified and he was a director of 25 firms. His activities in civic affairs were nearly as widespread as his professional work. He was a life trustee of Clemson College, South Carolina's A. and M. school, and was chair-

man of the board of the J. E. Surrine Textile Foundation, Inc., an institution conceived during the war and dedicated to the improvement of textile education in South Carolina. Mr. Surrine was a past president of the Greenville Chamber of Commerce, headed the Greater Greenville Community Chest and was active in its work over a period of years, was a past president of the Greenville Y. M. C. A. and a trustee of the Greenville Little Theatre. He was a past president of the Greenville Rotary Club and one of that organization's few honorary members. In World War I he was chairman of the Price Fixing Committee for Cotton Textiles and during World War II served as a member of the Cotton Mill Industry Advisory Committee for the War Production Board.

His only immediate survivor is his brother, William G. Surrine, Greenville attorney and president of Textile Hall Corp.

**George L. Hardwick**, 56, president of Hardwick Woolen Mills, Inc., at Cleveland, Tenn., died Aug. 10 of a heart attack in Atlanta, Ga., where he had been taken for observation and treatment. He had been in ill health for some time. He is survived by his wife, three sons, two brothers and four sisters.

**David A. Kelly**, 85, veteran of 76 years of work in textile mills in North Carolina, died Aug. 11 at a hospital in Lincolnton, N. C. Mr. Kelly made his home in Dallas, N. C., and for the past six years had been overseers of Dalnoca Mills in Dallas. He is survived by four sons and three daughters.

**F. C. Farnsworth**, 79, a partner in Farnsworth & Farnsworth of New York, textile consultants, died recently. Mr. Farnsworth had been in the textile industry for more than 50 years, beginning with the woolen house of Deering, Milliken & Co. Survivors include his wife, a son, and his brother.

**Alonzo G. Dudley**, 66, president of Climax Hosiery Mills and Athens Mfg. Co., died Aug. 1 at his home in Athens, Ga. He was an outstanding civic leader and was mayor of Athens for six terms. Surviving are his widow, a daughter and three sons.

**C. H. Voelker**, 45, plant engineer at Martha Mills in Thomaston, Ga., since 1937, died July 30. At Martha Mills Mr. Voelker was credited with making a number of engineering contributions of importance. Surviving are his wife, two daughters, his parents, four brothers and two sisters.

## For the Textile Industry's Use

### EQUIPMENT — SUPPLIES — LITERATURE

#### Universal Moves Atwood Personnel To Cranston

Sales and engineering personnel of the Atwood Division of Universal Winding Co., will transfer activities to the Universal Winding headquarters in Cranston, R. I., E. K. Swanson, sales manager, said this month. The move, Mr. Swanson said, is to more closely knit Atwood's activities to the Universal program. Universal recently bought Atwood, as noted.

Sales personnel moving from Stonington, Conn., to the Cranston headquarters include William L. Paulhamous, assistant sales manager of the Atwood Division and Richard Lenihan, in charge of domestic and foreign sales details. Atwood salesmen will remain in the field in charge of their respective sections. They are Theodore Dewhurst, in charge of New England; John Breen, in charge of New York and Philadelphia, and Fred Sails, Charlotte, in charge of Southern sales.

The Atwood Division engineering staff, which will be a section of Universal's engineering and development group, will also be transferred to

Cranston. The men are John Bradshaw, head of the Atwood Division; E. J. Brouthers, and William Warner, machine designers; J. B. E. Greenwood, in charge of yarn and twisting experiments, and Myron Swanton who has recently been hired as planning engineer.

#### Towmotor Corp. Announces Side Shifter Accessory

A new fork life truck accessory, the side shifter, which permits the operator to pick up or deposit a unit load in an exact location without repositioning the truck itself, has just been announced by Towmotor Corp., 1226 East 152nd Street, Cleveland, Ohio. The new accessory provides lateral movement of a load, on forks or pallet, to either side. Through elimination of truck maneuvering often required in operations where loads must be positioned exactly, especially in stacking, the side shifter saves considerable time and effort and assures maximum use of available storage area.

Hydraulically operated through a sensitive, double-acting cylinder con-

trolled by a lever mounted convenient to the operator, the side shifter will move the carriage face and the forks a distance of 3½ inches in either direction. The accessory is applicable to any industry utilizing fork life trucks and is designed to operate with standard Towmotor forks or Priester or Schmidgall forks. Complete information on this new time-saving accessory may be obtained by writing direct to Towmotor Corp., Cleveland 10, Ohio.

#### Sealed Precision Switch Is Announced By Micro

Micro Switch of Freeport, Ill., has announced a new sealed precision switch with adjustable roller arm actuator for use in industrial equipment where the switch is exposed to dust, dirt, abrasives, and the occasional splash of oil and water. The type N2 die cast enclosed switch is designed particularly for cam and slide actuation on industrial applications. The roller arm actuator is adjustable both vertically and horizontally. The switch is supplied with either bottom mounting or side mounting facility. The synthetic



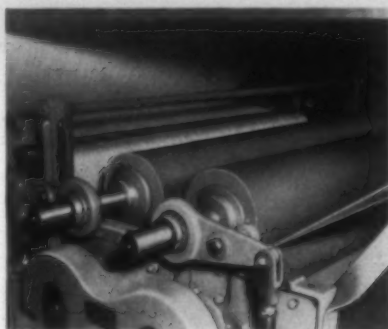
rubber boot covering the operating plunger and the gasket assembled between the bottom plate and the housing case provides a completely sealed switch unit, when the conduit hub is fitted with rigid conduit.

Outstanding characteristics whose accuracy is said to be maintained throughout millions of operations are as follows: operating force, six to 16 ounces; release force, four ounces, minimum; pretravel, 11/64 inch, maximum; overtravel, 7/32 inch, minimum; movement differential, 0.006 inch, maximum; and net weight, 0.64 pounds, maximum.

### Armstrong Cork Develops Rubber Squeeze Roll Cover

A synthetic rubber squeeze roll covering for use on slashers has been developed and is now being marketed by the Armstrong Cork Co., Lancaster, Pa. The new product, called Armstrong's Accotex slasher squeeze roll cover, is designed to replace the wool blanket and yarn coverings used in the past. One of the outstanding features of Armstrong's Accotex cover is that

it can be used for long periods of time without attention, except drying off when size boxes are cleaned. Already a number of these covers have been in use for as long as three years without noticeable wear, indicating that they can still be used for some time. This feature eliminates the necessity of a mill maintaining expensive stocks of blankets and substantially reduces labor and downtime costs.



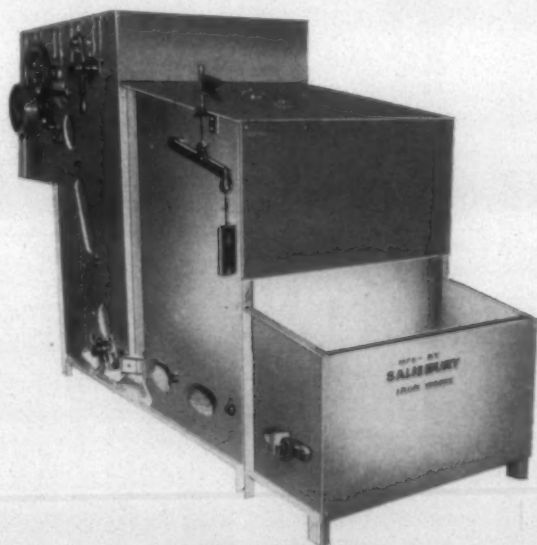
The rubber roll covering maintains the same density day after day, giving a more uniform warp, and, since the cover is seamless, warps are not streaked. It can be used with satisfaction on both back and finisher rolls. For best

results when Accotex covers are used on back rolls, a thinner size solution should be used. The new squeeze roll covers will be applied, cured, and sized to the proper outside diameter at the Armstrong plant in South Braintree, Mass., then returned to the mill ready for use.

Projected plans for the construction of new company laboratories, comparing with the most modern and attractive industrial research and development facilities in the country, have been announced by officials of Armstrong Cork Co. Bids for the construction of the research facilities on a 40-acre site, three miles from Lancaster, location of the home offices of the company, will be asked late this fall. If bids are satisfactory as to cost, contracts will be let promptly and construction will be started as soon as possible. It is hoped that the planned new laboratory will be ready for use by the summer of 1949.

### New Technical Books Offered By Chemical Publishing Co.

Chemical Publishing Co., Inc., 26 Court Street, Brooklyn, N. Y., is cur-



**MODEL S BF-1  
ALSO MODEL F-5**

**Loom Beams**

**SALISBURY IRON WORKS, INC.**  
SALISBURY, N. C.

### SALISBURY ENCLOSED BLENDING FEEDER

Model S BF-1 Salisbury Enclosed Cotton Blending Feeder is used for the processing of cotton, wool, and synthetics.

This machine has been designed by textile engineers long experienced in the development and operation of machinery for the textile industry. Salisbury Blending Feeders are precision manufactured of the finest quality materials and workmanship to render long and dependable service with a minimum of maintenance and operational cost.

#### GENERAL SPECIFICATIONS

The Salisbury Enclosed Blending Feeder has a heavy fabricated steel frame which makes it a rugged, durable, and trouble free unit. All gears and chains are covered with guards for safety.

Oilite bronze self-aligning bearings are used throughout, eliminating oil leakage and assuring clean fibres.

Provisions are made for the installation of automatic sprinkler head and vacuum lines. All usable waste fibres may be reclaimed from waste container.

Salisbury Blending Feeders are designed to allow installation of kick-off roll or combing attachment.

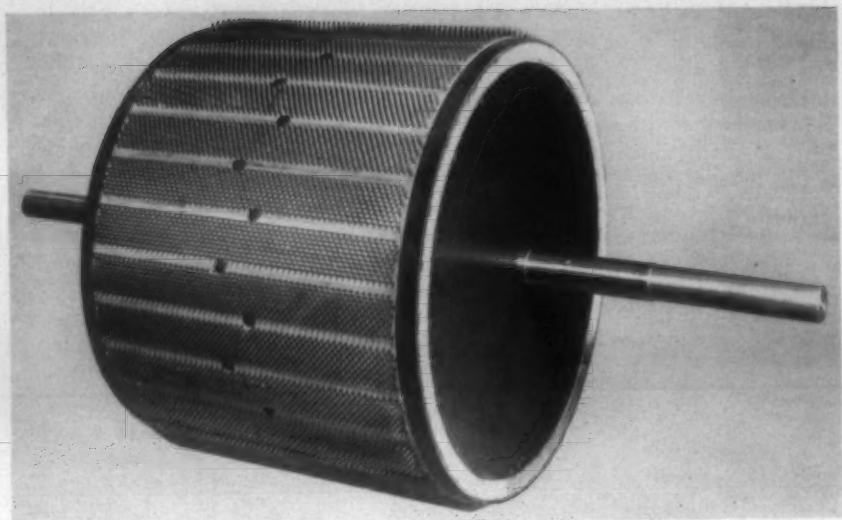
The machine may be used in a blending line or in combination with a picker.

This model is provided with ample storage space. This facilitates better blending of various fibres and requires less attention from the operator.

Model S BF-1 as shown is equipped with a lower or front apron which extends outside the storage chamber of the machine and has a small bin into which the raw material is placed by the operator. It is then carried into the storage chamber on the conveyor apron. This model also has a combing attachment as standard equipment.

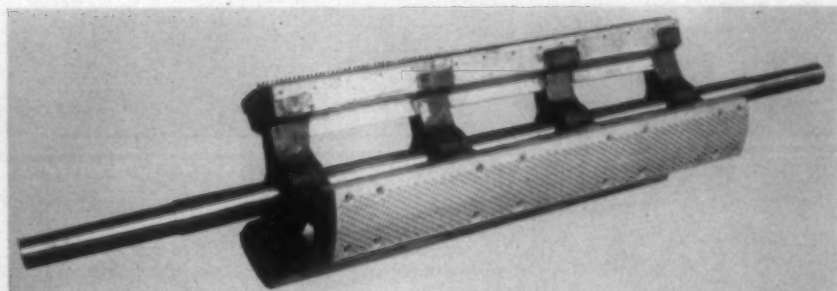
This machine is manufactured of the finest material and workmanship and has proven its worth by satisfactory, trouble free operation.





## Todd-Long Now Offers Beater Lag Cylinders

For Waste Machines



## 41-Inch Standard Kirschner Beaters

These strong, efficient and well-built cylinders and beaters are worthy additions to the Todd-Long Line of Textile Equipment. Immediate Deliveries.

### Todd-Long Picker Aprons

Spiked and Plain, for all makes of Pickers, Openers, Breakers, Waste Machines and Garnet Machines.

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rently offering four new technical books which will be of interest in the industry. The new publications are *Air Conditioning* by Herbert and Harold Herkimer (720 pages, illustrated, \$12); *Modern Organic Finishes* by Rollin H. Wampler (452 pages, illustrated, \$8.50); *Fluorochemistry* by Jack DeMent (796 pages, \$14.50; and *Catalytic Chemistry* by Henry W. Lohse (471 pages, illustrated, \$8.50).

### Amioca Again Available In Large Quantities

Amioca, the only commercial starch composed of 100 per cent amylopectin, is again available in large quantities, according to National Starch Products, Inc., 270 Madison Avenue, New York City. In the textile field, Amioca or its modifications provide sizings with adhesive, non-jelling and film-forming properties and excellent rinsability, as well as textile finishes with clear, glossy films and resistance to iron-browning. For greaseproof tub sizings, the non-jelling characteristics of the domestic starch permit high solids application.

Obtained from domestically bred waxy maize, Amioca, as described by Dr. C. G. Caldwell, National's research co-ordinator, consists of amylopectin which is generally believed to be a more or less branched or non-linear polymer of glucose. Its molecules, being highly hydrated and unable to associate readily, give rise to highly viscous, clear, cohesive pastes, free from any tendency to increase in viscosity or jell on ageing. Other commercial starches, such as corn, tapioca, wheat and potato, contain from 20 to 30 per cent amylose in addition to amylopectin. In pastes, amylose molecules tend to associate with each other and with the amylopectin molecules. This tendency leads to increasing viscosity, jelling and increased opacity with ageing.

### New Catalog Is Offered As Working Tool For Engineers

Original engineering thinking, based on the most recently developed needs of the process industries, is embodied in the Kontrol Motor line of pressure regulators and diaphragm motor valves described in a new catalog just released by Kieley & Mueller, Inc., North Bergen, N. J. The equipment illustrated capitalizes fully on production methods evolved since the war, and several units shown are said by the 68-year-old



firm to represent the greatest advances in equipment of this type in the last 50 years. Running well over 100 pages, the new catalog is made up of five sections covering, in addition to diaphragm valves, the company's lines of liquid level controllers, strainers, pressure reducing and regulating valves, pump governors, and such steam plant equipment as back pressure valves, atmospheric relief valves, diaphragm relief valves, oil and grease extractors, and exhaust heads.

The book, called Catalog 47, is designed as a working tool for engineers, is liberally illustrated with over 250 cutaway views, performance charts and tables. Particular emphasis is given to dimension and weight tables. Data to be given when ordering is outlined in detail for each type of equipment the catalog describes, in convenient proximity to photos. The book is ring-bound to open flat and is of the preferred 8 1/2 x 11 file size. No broadcast distribution is planned for the catalog, but copies are available for steam plant and process industry engineers, designers and purchasing personnel, on request to Kieley & Mueller, Inc., North Bergen, N. J.

#### Rubicon Items Described In Technical Bulletin

Rubicon Co., 3673 Ridge Avenue, Philadelphia, Pa., announces publication of a new 12-page illustrated technical bulletin (No. 100) describing in detail its complete line of resistance standards and resistance bridges. Operation, application, construction and other pertinent data are furnished on Wheatstone, Kelvin, Mueller and limit bridges, available in a variety of models for laboratory, plant and field use. Standard resistors of the Bureau of Standards and Reichsanstalt types, Standard shunts and a wide range of Decade resistance boxes are described. Individual decade resistors suitable for use as components in other equipment are also listed. Limits of error range from 0.01 per cent to 0.25 per cent and are stated for each item. A copy of Bulletin 100 will be sent upon request to the company.

#### Improved Cloth Guider Offered By Mount Hope

An improved swing guider and opener, for use in finishing plants, is currently offered to the industry by

## DOES YOUR PRESENT STRAPPING



## HAVE ALL OF THESE FEATURES?

- ✓ LACK OF STRETCH
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Has been scientifically designed to meet *all* of these requirements of low cost production efficiency

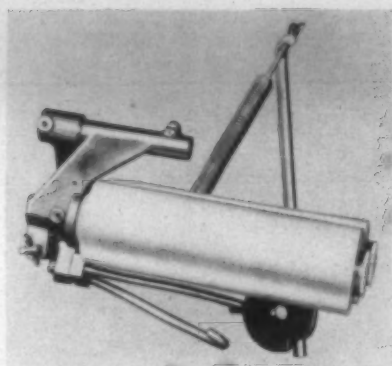
A completely new, improved fabric strapping developed by the pioneer in the field. . . Immediate deliveries in any size, shape or thickness.

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GREENVILLE, S. C.      MAYWOOD, N. J.  
MAIN OFFICE      EASTERN DIVISION



Mount Hope Machinery Co. of Taunton, Mass., manufacturer of cloth handling devices. The guider is now made with a stainless steel frame which, the manufacturer claims, is stronger than the old frame, as well as lighter and corrosion proof. The stainless steel roll shafts are now hardened and ground, making for longer life and lower upkeep.



Original claims of superiority of the Mount Hope swing guider are retained as follows: purely mechanical, no electrical switches or coils to burn out or short circuit and no air valves to clog;

only two moving parts with upkeep correspondingly low; will handle from heaviest to most delicate fabrics; rust proof, preventing soiling of fabrics; reversible rubber rolls; each head has two ball bearings, grease packed for lifetime service; and all bearings are waterproof, being protected by shields which deflect water even if a hose is accidentally turned on them when washing a machine.

### Gurley Stiffness Tester Offered For Textiles

A new motor-driven stiffness tester, designed for rapid, consistent and accurate tests on textiles has been developed by W. & L. E. Gurley of Troy, N. Y., manufacturer of scientific instruments. The tester measures the stiffness, or absence of it, of practically any thin flexible material, and it can also be used for testing coated fabrics. More convenient than hand-operated instruments, the Gurley stiffness tester has a balanced pointer which pivots in jewel bearings, and moves parallel to a sine scale mounted on the base. It is

loaded below the center with weights of five, 25, 50 or 200 grams, fastened one, two or four inches from the pivots. The arm carrying the sample being tested is moved by a small-gear synchronous motor which is controlled by a reversing switch on the base.



To make a test a sample is first cut to a standard width and length ( $\frac{1}{2}$ -inch, one-inch or two inches wide, and from  $\frac{1}{2}$ -inch to  $4\frac{1}{2}$  inches long), clamped in a movable clamp so that the free end overlaps the top of the pointer by  $\frac{1}{4}$ -inch; and pressed against the top of the pointer until it is bent sufficiently to assume a short arc, shortening it by the  $\frac{1}{4}$ -inch overlap. The pointer is then automatically released. The greatest reading of the pointer against the sine scale is averaged in both directions, to eliminate any effects of curl, and may be multiplied by a factor applying to one of 144 combinations of sample and loading weight. The product is expressed as the stiffness of the sample. Bulletin No. 1440 containing complete details of the new motor-operated stiffness tester is available on request to W. & L. E. Gurley, Troy, N. Y.



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★ **Always Uniform**

★ **Boils Thin**

**THE KEEVER STARCH COMPANY** Columbus 15, Ohio

### Shop Rules Contained In Clever New Booklet

Infractions of shop rules can raise havoc and disturb the domestic serenity of any working establishment. They waste time, cost money. Most books and manuals on the subjects have been dry, stuffy and dogmatic. In an effort to find a solution, a *Saturday Evening Post* writer teamed up with an ex-Navy commander who was a manufacturer in his own right and a trade association executive. They have produced a sim-



ple, easy-to-read booklet called *Whatever Became of Slow Joe Blow?*

The *Saturday Evening Post* writer happens to be a pretty good artist, too, so he did the book's clever illustrations. He's Charles K. Ellsworth and you've probably read his stories. The ex-Navy man and industrialist is J. R. MacAllister. The result, a 16-page booklet, a happy combination of cartoons and text, is designed to replace or implement old-fashioned manuals that set up hard-and-fast rules of behavior for workers. *Slow Joe Blow* is the first of a series in this relatively new technique of getting across industrial relations ideas. A free copy will be mailed on request to MacAllister Publications, 420 Lexington Avenue, New York 17, N. Y.

### Otis Report Points Way To Avoid Elevator Accidents

From a comprehensive study of elevator accidents reported in the United States during the past year, the Otis Elevator Co. has announced its belief that nearly all could have been avoided if proper safety devices had been in use and if the elevators had been of modern construction. There were 251 persons injured in accidents analyzed, and all but 21 were hurt when entering or leaving elevators; they opened hoistway doors and fell down the shafts, were on the landings at the hoistway entrances, or were in the cars at the car entrances. Most of these accidents would have been avoided if modern safety devices had been installed in the elevators concerned. These include hoistway door interlocks, which prevent the hoistway door from opening unless the car is there, and prevent the car from starting up unless the door is locked; car door switches, which prevent the elevator from starting unless the inner door is closed; and, automatic leveling of the cars with the landing floors. Copies of a 12-page report on the study may be obtained from the Otis Elevator Co., 260 Eleventh Avenue, New York City.

### New Monsanto Plant To Manufacture Santomerse

Completion of a new \$3,000,000 plant at Monsanto, Ill., for the manufacture of Santomerse No. 1, a synthetic detergent with a wide variety of industrial and home uses, was announced Aug. 11 by Monsanto Chemical Co., St. Louis, Mo. The plant, a



## WHY MORE MILLS LOOK TO NORTH

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for use with any  
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for setting twist  
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one-story concrete building, gives Monsanto additional large-scale facilities for manufacturing a product which has long been listed as one of the leading "soapless soaps" produced by American industry. Production will also continue at Monsanto's Nitro, W. Va., plant, which has manufactured Santomerse for many years. Among the numerous advantages possessed by Santomerse is the ability to function efficiently and economically in water which is hard or soft, hot or cold. It also functions in either acid or alkaline solutions and prevents formation of insoluble curds, scum or rings in hard water.

The product's properties are such that it provides wetting out, dispers-

ing, emulsifying, penetrating and cleaning actions all in one operation. It is available in two dry forms, bead and flake. The spray-dried, bead form is primarily suited to packaging for household use. The flake form has been used by industry in numerous ways. Dairy, steel and textile firms have used Santomerse in product-cleaning throughout various processes. It has been employed in cotton, rayon, silk and nylon dyeing, bleaching and finishing, and wool-processing.

### New Offices And Showroom Are Occupied By Plexon

New executive offices and showroom have been taken by Freyberg Bros.

Strauss, Inc., and Plexon, Inc., at 419 Fourth Avenue, New York City. The new offices occupy the entire top floor at this address and double the former space at 212 Fifth Avenue. A circular showroom with removable stage for permanent exhibits and fashion displays of the two firms' products will be the feature. Freyberg Bros-Strauss, Inc., manufactures a large variety of ribbons, store tie materials and the new Ruban d'Art for crochet and knitting. Plexon, Inc., manufactures Plexon coated yarns and cords, and Pigtail, new coated wire. The decor and color scheme for the new offices is keyed to the new fabrics of Plexon, many of which will be used for draperies and upholstery. Plexon's expanding business here and abroad necessitated the new and enlarged quarters, according to N. J. Strauss, vice-president of the concern. Occupancy of the new offices was taken Aug. 1.

### New Suction-Type Cylinder Dryer Developed By Firms

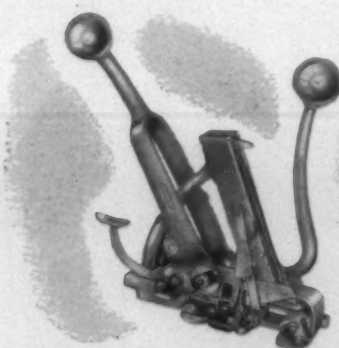
A new suction-type, cylinder dryer is now available which saves time in finishing a variety of textile fabrics while providing precision control of quality. The dryer was developed jointly by the American Viscose Corp.'s textile research department at Marcus Hook, Pa., and Proctor & Schwartz, Inc. In some cases the machine reduces drying time from 30 minutes to five and one man can operate it, it is claimed. He can instantly stop and reverse it if he discovers defects in goods about to enter the dryer, and thus prevent them from becoming permanently set in the finish.

The fabric enters the machine from a spreading device and is then fed onto a scrim-covered, perforated, revolving cylinder. A continuous cover-belt of very open mesh holds the fabric in position. Blowers force air, previously heated to desired conditions through the cover-belt, fabric and cylinder. Disks adjustable to fabric width confine this air flow solely to the area covered by the fabric. Its high velocity holds the fabric firmly against the cylinder without stretch, strain or change in width. The new dryer has been thoroughly tested in practical service on tricot, circular knit and open-width woven fabrics, on resin finishing, rayon and silk prints, and others.



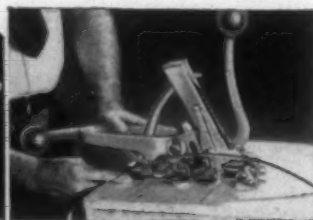
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2 Loop of strapping is slipped under straplocks and between shear blades and pulled tight.



3 Strapping is tensioned by bringing tightening handle back to horizontal position.



4 Strapping is cut and seal crimped by moving sealing lever forward.



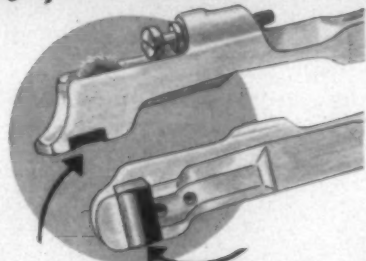
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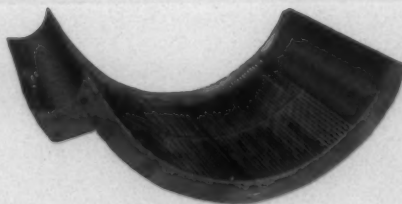
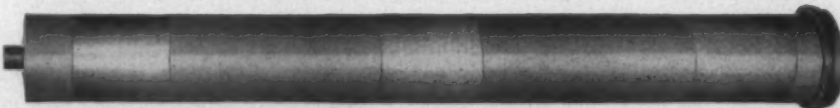
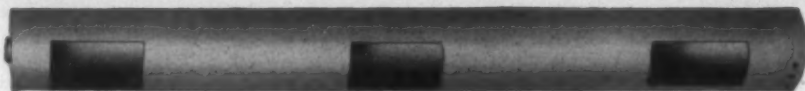
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Young man, now employed as overseer of weaving with large mill wishes to hear from reliable mill in South Carolina or Georgia needing A-1 weave room man. Write "Weaver," care Textile Bulletin, P. O. Box 1225, Charlotte, N. C.

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POSITION WANTED as Overseer Carding or Assistant Overseer Carding on first or second shift. 53 years old; good health; good manager of help; 30 years' experience and sober. Furnish best of references. Write "L. D. M.," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—Job inspecting cloth on loom. Six years' experience on fancy shirting dooby. Strictly sober. Write "W. F. R.," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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Overseer of Cloth Room, Large Coarse  
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Write "Clothroom," care Textile Bulletin,  
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WANTED—Overseer Weaving for 236 C&K and  
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interested in reliable man who can get top pro-  
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Willing to pay to get a good man. Furnish ref-  
erences with application. Write "O. W.," care  
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POSITION WANTED as Overseer Carding. 53  
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on colored work and rayon mixed; 25 years as  
overseer. Would consider night assistant super-  
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"R. A. Y.," care Textile Bulletin, P. O. Box  
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Textile Mill Brooms  
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Creel for spools or tubes, about 1,600 ends.  
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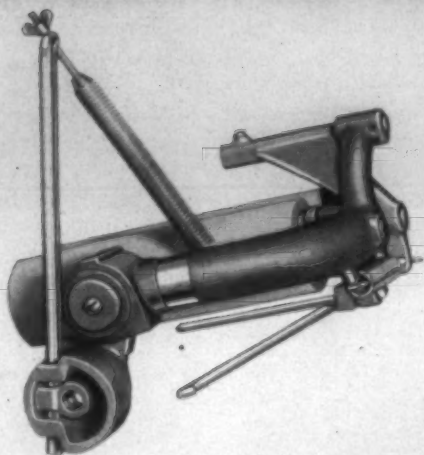
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In Tennessee has opening for competent  
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### NOW MADE WITH STAINLESS STEEL FRAME

This new frame is stronger than the old frame, also lighter and corrosion proof, and the stainless steel roll shafts are now hardened and ground. These improvements make for longer life and lower maintenance costs.

The original Mount Hope Swing Guider points of superiority are retained. They are as follows:

Purely mechanical. No electrical switches or coils to burn out or short circuit; no air valves to clog.

Only two moving parts. Upkeep correspondingly low.

Wide adaptability. Will handle from heaviest to most delicate fabrics.

Positive but gentle control. No more control is exerted than is necessary for the particular conditions at the moment.

Rust proof. Prevents soiling of fabrics.

Reversible rubber rolls. When end of roll contacting salvage becomes worn, it can be reversed, thus giving double life.

Each head has two ball bearings, grease packed for a lifetime of service. These permit free pivoting action.

All bearings are waterproof, being protected by shields, which deflect water, even if a hose is accidentally turned on them when washing a machine.

*Bulletin SG on request.*

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**REPRESENTATIVES** — John H. Andresen, Inc., 138 Grand St., Paterson, N. J.; Ingalls Engineering Co., 1214 Union Trust Bldg., Providence, R. I.; Slaughter Machinery Co., Charlotte 1, N. C.; Sidney Springer, 1521 South Grand Ave., Los Angeles 15, California; W. J. Westaway Co., Ltd., Hamilton and Montreal 3, Canada.

### Reveal Plan to Use German Gray Goods Mills

Details concerning the program whereby individual American manufacturers of finished goods can finance shipments of raw cotton to German mills to be processed into gray goods for re-shipment to their own finishing mills were disclosed recently by an official of the trade and industry office of the military government. Arrangements for such transactions would necessarily have to be made with the bizonal board of the Joint Export-Import Agency, it was reported, since only this group is in possession of the knowledge of what unused capacity of production would be available outside the demands of the cotton program established by this agency.

Under the plan, it was stated that American manufacturers desiring to avail themselves of the privilege of this arrangement must first make application to the representatives of the bizonal board in Washington. Details of the manner of handling the finances and the rate of pay will be fixed there, should approval be granted for German processing of American raw goods. Other phases of this plan are being worked out so that a pattern will be set for manufacturers of other types of goods who wish to have raw goods returned to United States in a semi-finished condition. When details on this have been worked out they will be announced to manufacturers, the official said.

### Jap Mills Hampered By Uncertainties

Uncertainties concerning their corporate reorganization under the anti-trust law and slowness of the Japanese government to adjust prices adequately are cited as two major obstacles hampering the reconstruction of Japanese cotton spinning companies. The *Oriental Economist*, Japan's leading economic journal, stated in a recent editorial that dissolution of the leading spinning companies is "inevitable" and that this industry, "a cardinal pillar of the national industrial reconstruction," is hampered by the uncertainty which has arisen.

Pointing out that there appears to be a tendency to wish to split up the companies into individual concerns handling individual fibers, the *Economist* states that such steps were best delayed until after the present companies have assisted in the nation's economic recovery. In discussing the price ceiling situation, the editorial points out that labor's demand for higher wages have materially increased manufacturing costs. In this respect, the discussion indicates a trend in Japanese industry which will probably have major influence in the competitive position of Japanese textiles in the world market, when the internal price structure is really reflected in selling prices.

### Du Pont Reports Three-Month Revenue

Total net income of E. I. du Pont de Nemours & Co. for the three months ended June 30, 1947, amounted to \$30,785,977, comparing with \$26,806,882 for the like 1946 period. For the six months to June 30, the total net was \$61,619,650, against \$55,731,895. Sales and operating revenues for the three-month period were \$195,911,412, against \$162,491,977, and for the six-month period totaled \$385,703,197, against \$315,324,279. Operating income, net, totaled \$22,637,702, against \$19,857,842 for the three months, and \$49,503,020, against \$38,971,453 for the six months.



## History Of U. S. Cotton Textiles

(Continued from Page 27) greatest production rate in its history. Long hours of operation which depreciated machinery added to the fact that new equipment was almost unavailable during the war years, resulted in a tremendous pent-up demand for new machinery and equipment when the end of the war came. As a result, the industry found itself spending a \$100,000,000 a year for new equipment, renovation and building.

Much of the new equipment represents great mechanical advancement. Since Slater's day, the industry has strived to perfect faster machines, producing better quality goods, performing the modern American miracle of cutting costs while simultaneously raising wages. One of the noticeable advances was the invention of automatic reloading of bobbins into the shuttles of looms, perfected in 1898.

Just as there is a pentup demand for new equipment there is also a need for skilled personnel. Textile schools and colleges all over the country are operating at capacity in an attempt to fill the demand. Particularly is there a tremendous demand for skilled technicians in the field of research. This industry, third largest in America, with 470,000 employees, is now spending a million dollars for every thousand that went into research prior to 1940.

As never before, mill textile laboratories and big research centers serving the entire industry are studying the fibers, the raw cotton which is the "queen" of all fibers as well as the new fibers, synthetic or natural. Scientists are constantly seeking ways to improve the old or to impart valuable new qualities to cotton through blends with the new fibers. Research laboratories are likewise striving for greater

efficiency in production methods while in the field of finishing treatments for yarn or cloth, they are developing new synthetic resins and plastics to make textile products more durable and useful. In other words, the industry is entering an era of science as its research activities lead the way to new products, better equipment and greater rewards for the thousands of men and women who take part in its manifold operations.

## \$100,000 Building Gift Made To I. T. T.

The building program of the Institute of Textile Technology at Charlottesville, Va., has been given substantial impetus as a result of a contribution from Callaway Institute, Inc., of LaGrange, Ga., in the sum of \$80,000 for the purpose of building and equipping a seminar or auditorium building to be located on the grounds of the institute at Charlottesville and dedicated to the memory of the late Stuart W. Cramer. A contribution of \$20,000 from Callaway Mills, LaGrange, has been designated for use in the same project making a total of \$100,000 now available for it.

Callaway Institute, Inc., is dedicated to research and education in the field of textiles and its board of trustees is composed of Cason J. Callaway of Hamilton, Ga., Fuller E. Callaway, Jr., A. B. Edge, Jr., Hatton Lovejoy and Robert W. Philip of LaGrange, Ga.

Stuart W. Cramer, Sr, for whom this building is to be named, was born in Thomasville, N. C., March 31, 1868, and died in Cramerton, N. C., July 2, 1940. He was the engineer and builder of a great many of the plants that now comprise the textile industry of the South. An inventor of

### The New

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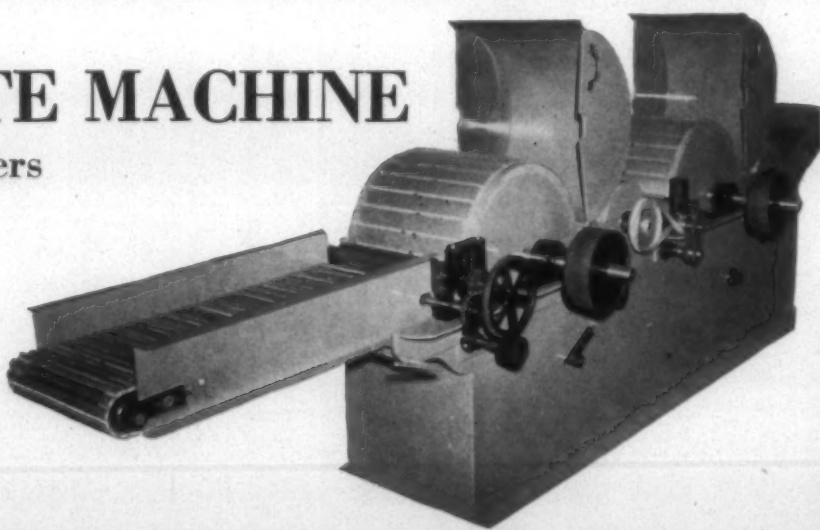
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outstanding note, his successful efforts in the application of humidification and air conditioning in textile manufacture were a major factor in the successful expansion of the industry in the Southern area. Mr. Cramer had to his credit more than 60 patents in this and other phases of textile engineering. He was also an author of note and several of his books relating to textile manufacture are regarded as authoritative references in their fields today. He was much ahead of his day in his concept of the need for research and education in the textile industry and the donors of these contributions felt that a fitting recognition of him and his many contributions to the progress of the industry would be best achieved by naming this building for him.

The Institute of Textile Technology has also received from the Association of Cotton Textile Merchants of New York as individuals the funds with which to build and equip a technical library building on the grounds of the institute, to be known as the Merchants Library.

It is anticipated that construction of both these buildings will commence in the immediate future. The Engineering and Applications Building commenced by the institute approximately a year ago is now complete and its staff is in the process of moving in. This building is three stories in height and occupies a position at the rear of the grounds of the institute. All of the construction contemplated in this area will be in keeping with Jeffersonian standards and should add materially to the beauty of the neighborhood.

The Institute of Textile Technology is a membership corporation supported entirely by fees from member mills. It is primarily a graduate school taking 15 candidates a year who already have their bachelor's degrees in the fields of science affecting textiles, from accredited institutions and

carrying them through two years to the master's degree and four years to the doctor's degree.

Fuller E. Callaway, Jr., who retired in 1945 as president of Callaway Mills, was the first chairman of the board of the Institute of Textile Technology and retired from this post last year, being succeeded by William N. Banks of Grantville, Ga. The other officers of the corporation are Luther H. Hodges of Marshall Field & Co., vice-chairman of the board; Roger Milliken of Deering Milliken & Co., New York City, treasurer; Arthur M. Allen of Hinckley, Allen, Tillinghast & Wheeler of Providence, R. I., secretary.

These contributions totaling \$100,000 to the construction of the seminar building are concrete evidence of the attitude reflected by Callaway Institute, Inc., and Callaway Mills who have long had an abiding interest in the subject of education and research in the field of textiles. With this addition the institute feels substantial progress has been made in meeting its requirements for building facilities.

### Viscose Reports Second Quarter Earnings

American Viscose Corp. reports consolidated net earnings of \$4,674,906 for the quarter ending June 30, 1947, equivalent, after preferred dividend requirements, to \$2.14 per share on 2,047,854 shares of common stock outstanding. These earnings compare with \$2,651,767 for the second quarter of 1946 or \$1.37 per share of common stock on 1,720,443 shares then outstanding. The consolidated net earnings of \$8,705,801 for the six months ending June 30, 1947, is equivalent, after preferred dividend requirements, to \$3.96 per share of common stock outstanding. These earnings compare with \$6,101,383 for the corresponding



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period of 1946 or \$3.20 per share of common stock then outstanding.

Additional charges of \$1,800,000 to operations were made in the second quarter of 1947 to provide for high cost raw material purchases and for anticipated early obsolescence of certain plant facilities. These charges for the six months ending June 30, 1947, totaled \$3,400,000. The net sales for the first six months of 1947 were \$94,016,919 as compared with \$67,753,192 for the corresponding period of 1946, an increase of 39 per cent. Dividends declared and paid during the six months ending June 30, 1947, were \$2.50 per share on the five per cent cumulative preferred stock and \$1 per share on the common stock.

### Rayon Yarn Production Rebounds

Making a quick recovery from curtailed output in the previous month, rayon yarn and staple shipments in July totaling 81,800,000 pounds showed an increase of 15 per cent over those in June and 21 per cent above the corresponding month in 1946, according to the August issue of *Rayon Organon*, statistical bulletin of the Textile Economics Bureau, Inc.

During the first seven months of the year, domestic rayon yarn shipments totaled 534,300,000 pounds, an increase of ten per cent over the corresponding period in 1946. Rayon filament yarn shipments in July totaled 63,000,000 pounds, 21 per cent more than in July 1946, and 15 per cent above June, 1947, when a strike in one of the plants of a large acetate yarn producer cut deeply into rayon deliveries.

Rayon staple and tow shipments in July by domestic producers amounted to 18,800,000 pounds, 13 per cent above the June level and 20 per cent above July, 1946. Total rayon filament yarn stocks in producers' hands at the end of July amounted to 8,700,000 pounds, of which 6,400,000 pounds were viscose-cupra yarn, and 2,300,000 pounds of acetate yarn. Rayon staple stocks at the end of the month totaled 7,700,000 pounds.

Despite the loss of production resulting from the strike in June at a plant of the largest producer, second quarter rayon output totaling 236,800,000 pounds set a new record for a three-month period. It represented only a small increase over the first quarter of 1947, but was 11½ per cent greater than the corresponding quarter in 1946. Second quarter filament yarn production amounting to 179,800,000 pounds was 1½ per cent below the first quarter's output but was eight per cent over the same period last year. The decline in total yarn output was directly attributable to the lower acetate production which amounted to 48,800,000 pounds in the quarter, 7½ per cent under the level of the first quarter. Viscose-cupra yarn output, however, set a new high record with a total of 131,000,000 pounds and exceeded first quarter production by one per cent and second quarter 1946 output by ten per cent.

Rayon staple production in the second quarter totaled 57,000,000 pounds and set a new quarterly production record. It exceeded first quarter production by 17 per cent and last year's second quarter by 26 per cent. Viscose staple production was up 17½ per cent over the first quarter and acetate staple showed an increase of 15½ per cent.

Shipments of yarn to the textile trades declined during the second quarter with total deliveries four per cent below those in the first quarter. For the first six months of the year, however, shipments of yarn to the textile trades showed an eight per cent increase over the corresponding

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period in 1946. In the January-June, 1947, period, shipments to tire manufacturers showed an increase of five per cent.

Compared to the previous quarter, second quarter distribution of yarn shipments to individual domestic textile trades showed a loss of 47 per cent to the full-fashioned hosiery industry; minus  $4\frac{1}{2}$  per cent to seamless hosiery; minus ten per cent to circular knitting; plus one per cent to warp knitting; minus two per cent to broad woven; minus six per cent to narrow woven; and minus 15 per cent to miscellaneous uses.

During the first six months of the year, rayon yarn shipments to the various trades show the following changes compared with the January-June period of 1946: full-fashioned hosiery minus 50 per cent; seamless hosiery plus eight per cent; circular knitting plus ten per cent; warp knitting plus three per cent; broad woven plus eight per cent; miscellaneous uses plus 45 per cent; and narrow woven an increase of less than one-half of one per cent.

Rayon yarn exports by domestic producers in the second quarter showed an increase of  $8\frac{1}{2}$  per cent over the first quarter and 15 per cent over the same period last year. Of the total of 3,800,000 pounds shipped in the second quarter, 31 per cent represented direct exports of tire-type yarns while the balance were textile-type yarns.

### Dusting Cotton Bales For Fire Control

A simple method of making storages of baled cotton resistant to ordinary sources of ignition by dusting the surfaces with sodium bicarbonate powder, much as crops are dusted for insect control, has been suggested by W. E. Peterson, engineer of the Associated Factory Mutual Fire Insurance Cos. Baled cotton in storage presents a serious protection problem because the fibers are easily ignited and flame spreads rapidly, eventually producing smoky burrowing fires that are difficult to extinguish.

Preliminary tests at the experimental station of the Factory Mutual laboratories at Norwood, Mass., show that the new dusting method is effective in preventing ignition from small external sources such as sparks or match flames. When exposed to heat under such conditions, the sodium bicarbonate powder releases an inert gas that reduces the oxygen content so that ignition does not occur. Cotton bales dusted with sodium bicarbonate are not subject to the characteristic surface flash fires which usually occur and quickly involve all the exposed bales in the storage unit.

The powder is not expected to interfere with manufacturing as it will be blown from the fibers in the normal preliminary processing, and has no abrasive or corrosive action on bearings or machine parts. Further tests are now under way to work out the practical details as to method of application, the grades of sodium bicarbonate best suited, and the minimum amount required per unit of surface area.

The condition of the China Textile Corp. is pointed out as a significant signpost in the declining economy of Manchuria, slowing being throttled by difficulties posed by continued civil war and rigid trade restrictions. It is reported that this great cotton manufacturer, which has all the advantages of government control and monopoly, is practically at a standstill with only ten to 20,000 spindles of its 150,000 spindle capacity in operation. China communist assaults against power lines have accomplished most of the work stoppage.



## Georgia Tech Textile Building Planned

Complete construction plans have been prepared for the world's most modern and up-to-date instructional and laboratory building for textile engineering at the Georgia School of Technology, it was announced Aug. 10 by Herman A. Dickert, director of the A. French Textile School at the college. Interested contractors are being invited by the regents of the University System of Georgia to inspect the plans and to submit bids for the construction of the building, which it has been estimated will cost approximately \$750,000. Bids will be opened publicly at the Department of Architecture of the college on Friday, Sept. 5, 1947, at 2:00 p. m.

The new building will occupy almost a whole city block and is to be located at Hemphill Avenue and Third Street. Containing almost two acres of floor space, the functionally styled building will be two and three stories high, of reinforced concrete construction with brick and tile exterior walls. Plans call for an auditorium to seat 300; a three-story section with classrooms, offices, exhibit hall and laboratories; and a two-story section with laboratories and mill rooms. A large number of textile engineers and executives have been interviewed and many textile mills and schools inspected by the architects, Bush-Brown, Gailey & Hefferman, of Atlanta, Ga., in the preparation of their designs and plans.

Governor M. E. Thompson, through the board of regents, is making available from state funds the money for the building. Textile equipment for the laboratories and mill rooms have been promised by the Textile Education Foundation of Georgia. If construction bids are satisfactory, work on the building will start in September so that it can be completed by the fall of 1948.

The request for bids occurs on the 50th anniversary of the founding by the Georgia Legislature and interested textile manufacturers at the Georgia School of Technology in 1897 of the first textile school in the South. Governor Thompson and the textile manufacturers of Georgia have realized that many changes in textile technology and methods have taken place since 1897, and that a new building with modern textile mill and laboratory equipment is required now at Georgia Tech.

Main emphasis in the teaching and research work to be done in the new building is being placed in cotton, the primary fiber crop of Georgia and the South. Included among the many laboratories will be those for cotton classifying, cotton pickers, cotton cards, cotton spinning, and cotton looms. But due to the many advances made in other fibers and because of their increasing importance to Georgia's industrial economy, there will also be laboratories devoted to synthetic yarns, wool and other fibers.

All laboratories and mill rooms will be air conditioned, with provisions being made to provide individual controls in each room for humidity and temperature. The building design provides for placing windows on the north and south sides to provide the best light and to decrease the heat of the sun during the summer. According to Mr. Dickert, the new building will make it possible to almost triple the present enrollment in textile engineering. He states further that it will enable Georgia Tech to anticipate the needs of the textile industry and to train graduates who are qualified to meet the demands of a steadily growing and changing industry for supervisory, administrative and executive personnel.

## Check these Requirements for Competitive Production

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- *Process Piping*
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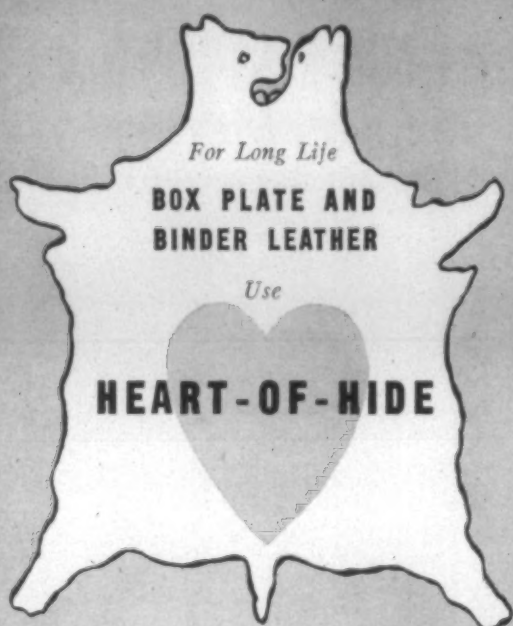
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## Governments Are Big Sales Markets

Thousands of American businessmen are ignoring one of their biggest peacetime markets even in the face of declining demand from regular sales outlets, according to the *New York Journal of Commerce*. It is the sale of products to the Federal, state and municipal governments, a market which total approximately five billion dollars yearly.

The Federal Bureau of Supply alone does a \$500,000,000 business annually. Its contracts range from pins and pencils to great machinery installations. It buys 28,000 different items. Yet only 26,000 business men and firms are on its active mailing list for information on what it wants to buy. A new study just issued by the business newspaper shows many firms not now selling to government agencies could do so if they were to go after those sales actively. It states the many government agencies are constantly on the alert for new sources of supply and are trying to make it as easy as possible for firms, both large and small, to do business with them.

The two largest government buyers are the Army and Navy, combined under the Secretary of Defense. Even without the specialized military equipment such as jet planes and 16-inch shells, their normal commercial needs run into hundreds of millions of dollars, the business newspaper reveals. The Federal Bureau of Supply's annual \$500,000,000 expenditure is the largest single government market for purely civilian goods. Altogether, the Federal Government is a market for approximately four billion dollars worth of products made by American industry—excluding strictly military items. State governments and municipalities account for another billion to make a grand total of five billion dollars.

The *Journal of Commerce* study shows manufacturers of nearly every type of article can find a sales outlet in the government markets. Jobbers and dealers, too, can do business with institutional buyers.

## Selling Price On Fine Wools Increased

The U. S. Department of Agriculture announced Aug. 5 that because of the generally good demand an increase is being made immediately in the selling price of finer grades of wool owned by the Commodity Credit Corp. The increase became effective at midnight, Aug. 5, 1947. The increase in the selling price is from one to two cents a pound, clean basis, on the grades involved. For example, the selling price on staple fine Territory graded wool is being increased from \$1.23 to \$1.25 a pound, clean basis. Selling prices on most grades below "fine" are unchanged.

Department officials explained that this action was taken after full consideration of the supply and demand factors affecting the finer grades of wool. The world picture in wool indicates a general shortage of the fine grades in rela-

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tion to demand. This demand is influenced by such factors as the resumption of operations in textile mills of wartorn countries, and the strong purchasing power of countries such as the United States. Domestically there has been a heavy demand for the products made from fine wools, such as for worsted men's and women's suiting fabrics.

Reports from the trade indicate that the fine wools of the 1947 clip are finding a good market. Market prices for such wool have been somewhat above former support levels on them. Also, such grades in C. C. C. stocks have been moving well.

The Department of Agriculture also announced that the wool price support program would be resumed Aug. 15. This action is being taken in accordance with new legislation passed by the 80th Congress and approved by the President. The legislation provides for price support at the 1946 level and makes it possible for Commodity Credit Corp. to sell its stocks on a competitive basis. Previously, legislation required that such wool be sold at not less than parity. Only wool on which the producer still holds title of ownership on Aug. 15 will be eligible for purchase under the program.

The program will be handled largely as in the past, with wool handlers acting as agents of the C. C. C. in making purchases and handling wool. The support price schedule, as required by the legislation, is in line with the 1946 support level. Under the program that year, the national average grower price was slightly more than 42 cents a pound, grease basis. However, some adjustments have been made in the purchase price schedule so that higher premiums will be paid on fine wools and a little less for the lower grade wools for which there is less demand. This adjustment, officials pointed out, reflects a more realistic comparison between the schedule of purchase prices and values in the market today.

The Agriculture Department August 8 estimated this year's production of shorn wool at 256,302,000 pounds, or 24,000,000 pounds less than last year and 104,000,000 pounds less than the 1936-45 average. This year's crop, smallest since 1925, was reported to be the result of a decrease in the number of sheep shorn. The number estimated shorn is 31,723,000 head, down about 3,000,000 head from last year and 13,000,000 below the ten-year average. The estimated weight per fleece is 8.8 pounds, compared with 8.6 last year and the ten-year average of 7.97 pounds.

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## Commodity Standards Division Formed by N.B.S.

Consolidation of two divisions of the National Bureau of Standards—Commercial Standards and Simplified Practice—into a single division called Commodity Standards has been announced by Dr. E. U. Condon, director of the bureau. The new Commodity Standards Division will continue the bureau's co-ordinating role in the development of voluntary simplified practice recommendations and commercial standards with industrial and technical groups. In addition, the division will be responsible for co-ordinating bureau work for the Federal Specifications Board. Edwin W. Ely, former chief of the Simplified Practice Divisions has been appointed as chief of the division and F. W. Reynolds, former acting chief of Commercial Standards, as assistant chief. As the official standardizing agency of the Federal Government, the bureau works in close co-operation with non-federal agencies doing similar work. Thus at the present time the bureau is represented on over 100 committees of the American Standards Association and is the managing agency for 17 American Standards Association projects. Similarly, the bureau is represented on 55 of the 63 technical committees of the American Society for Testing Materials, with more than 100 memberships, and close relations are maintained with other technical and industrial organizations. The continuation and strengthening of such relations is advantageous to both industry and government, according to Dr. Condon.

The simplified practice program, initiated in 1921, is concerned with the elimination of uneconomical variety in a particular line of manufactured products. Commercial standardization, begun in 1927, is directed toward the development of voluntary standards for manufactured products. In the case of both activities, the National Bureau of Standards acts as a centralizing agency only, on request from industrial, commercial, or consumer groups. Compliance with recommendations, which are approved by the groups concerned, is entirely voluntary. An important addition to the division's functions will be the Federal specifications work. Such specifications are vital in the purchase of goods by Federal agencies because the bid system, used by the government to ensure Federal economics in purchasing and to give an equal opportunity to all manufacturers under our competitive system of free enterprise, requires specifications for its operation. The division will also participate in the work of the technical committee of the United States Commodity Catalog Board which establishes standard lists of items for procurement and develops standard nomenclature and designation for goods purchased by the Federal Government.

## Stevens Stock Offering Is Oversubscribed

The offering of 200,000 shares of J. P. Stevens & Co., Inc., capital stock at \$34 a share has been reported all sold. Morgan Stanley & Co. and Harriman Ripley & Co., Inc., which headed a nationwide group of 41 investment firms making the offering, said the books were closed for the issue and reported the offering as substantially oversubscribed. The sale does not constitute new financing, it was pointed out, but represents a part of the holdings of the estate of Nathaniel Stevens. In the prospectus issued in connection with the stock sale the company estimated the aggregate remuneration for its fiscal year ending Oct. 31, 1947, of each of the directors and officers, who will serve



as such during any part of such fiscal year and who have received or may receive remuneration of more than \$20,000 from the company and its subsidiaries. These include:

Robert T. Stevens, chairman, \$60,000; John P. Stevens, Jr., president, \$60,000; William Fraser, treasurer, \$60,000; S. M. Beattie, vice-president, \$30,000; William C. Bennett, vice-president, \$60,000; Henry Black, divisional general manager, \$40,000; Harry C. Carter, vice-president, \$50,000; William J. Carter, vice-president, \$50,000; M. Clifford Edwards, vice-president, \$60,000; Raymond G. Emery, vice-president, \$65,000; Thomas W. Estes, vice-president, \$60,000; R. E. Henry, vice-president, \$70,000; Leroy T. Markert, assistant treasurer, \$30,000; Abbot Stevens, vice-president, \$45,000; Joseph H. Sutherland, vice-president, \$60,000; G. Nelson Tower, vice-president, \$60,000; William J. Erwin, vice-president, \$25,000; Campbell G. Garrett, vice-president, \$60,000; Andrew J. Sokol, vice-president, \$60,000; A. J. Smith, assistant treasurer, \$30,000 and Kenneth W. Fraser, controller, \$20,000.

### Signs Employment Pact With Burlington

William Klopman, former executive vice-president and director of Burlington Mills Corp., Greensboro, N. C., will receive \$25,000 per year from Burlington under the terms of a new employment contract from April 1, 1947, to Sept. 30, 1951. Klopman, whose resignation from the firm was effective April 1, will continue to serve Burlington Mills Corp. and its affiliates in an advisory capacity. For the duration of the new agreement, it is reported, Mr. Klopman is not to engage in competition with Burlington Mills or affiliates, except that he may weave for sale by him the production of not to exceed 750 looms and may prepare and spin yarn for such weaving.

It was made known that under the terms of the agreement Burlington was to sell two plants to William Klopman & Sons, Inc., the first being a rayon throwing plant known as Duchess Throwing Co. at Statesville, N. C., the selling price being \$150,000, and the other was the sale for \$200,000 of a weaving plant known as Covington Mills, located at Covington, Va. William Klopman & Sons agreed in both cases not to sell any land, machinery, buildings and equipment, except replacements, at any time prior to Oct. 1, 1951, without consent of Burlington, unless and until Burlington was given written notice of this desire. Burlington was to be notified of terms and conditions and the best bona fide offer which it then has for such property, and given the opportunity and option to purchase such properties at the price and upon the terms and conditions provided in such offer.

### A. A. T. C. C. Group To Study Standard Soils

F. A. Prisley of Watson Park Co., chairman of the committee on detergency of the American Association of Textile Chemists and Colorists, recently announced the formation of a new section to investigate the problem of standard soils and their use. E. A. Vitalis of American Cyanamid Co. was named to head the new section.

The fall meeting of the Piedmont Section of the American Association of Textile Chemists and Colorists will be held at the Charlotte Hotel, Charlotte, N. C., on Saturday, Oct. 4. New officers for the coming year will be chosen at the meeting.



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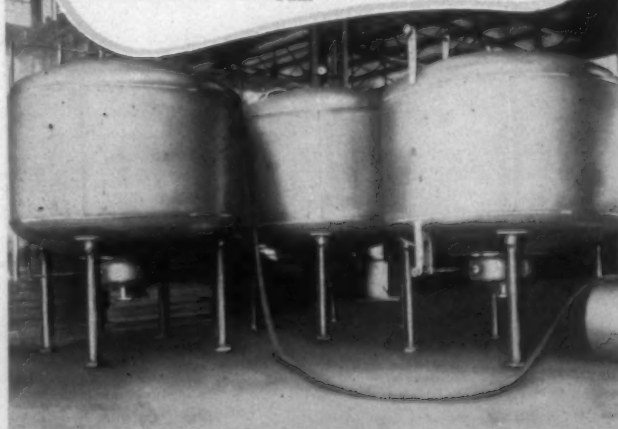
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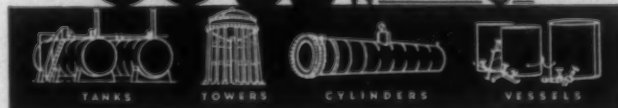
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## Cotton Goods Market

The United States Department of Agriculture has forecast this year's cotton crop at 11,844,000 bales, 38 per cent above last year's yield. A crop of 11,844,000 bales would be 3,204,000 above last year's abnormally short crop. Production for the 1936-45 period averaged 12,300,000 bales.

The prospective increase was welcomed by government officials and the cotton industry because reserves had been reduced to the lowest level in about 20 years.

While the acreage planted is nearly ten per cent below the department's recommendation, the indicated crop should be more than ample, officials said, to cover domestic needs and export requirements until the 1948 crop becomes available.

Supplementing production this year will be a reserve of about 2,700,000 bales from past crops.

Officials now expect domestic consumption during the current marketing year to be between 8,500,000 and 9,000,000 bales, compared with ten million during the past season. They expect exports to run about 2,000,000 bales compared with 3,000,000 during the past season.

The yield of lint cotton per acre was estimated at 270.8 pounds. This is 35.5 more than last year's yield and 20.2 pounds above average.

The acreage for harvest this year, allowing for average abandonment of the acreage in cultivation on July 1, was estimated at 20,989,000 acres. Such an acreage would be 19.2 per cent more than last year, but 12 per cent less than the 1936-45 average.

No major change in the present cotton gray cloth picture will develop as a result of the government forecast, Worth Street sources declare.

Admitting that this figure was somewhat larger than had been anticipated, New York commission house executives expressed the opinion that second-hands might start appearing with a subsequent easing in some print cloth quotations. Other than that one source thought that the report might lend encouragement to those among buyers who have been hesitating on forward contracts.

Other predictions heard in the market had it that a general lull would prevail until after Labor Day with many buyers preferring to wait until summer vacations were over. Such a quiet period would not disturb the market as mills were well sold ahead and enjoyed good trading several weeks ago.

Disappointment at the War Assets Administration offering of 2,500,000 yards of surplus duck and tent twill was registered along Worth Street where it is pointed out that as long as these offerings continue, there is little opportunity for mills making these goods to get onto a normal footing.

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# Cotton Yarns Market

A considerable amount of sampling is taking place in the Philadelphia yarn market at present, local distributors disclose. Buyers who employed the same types and counts of yarn for years are now testing several kinds of yarn they have never before used, it is noticed.

In several instances, yarn sellers have found customers postponing further coverage because of uncertainty as to type of yarn wanted for future production. Granting that there has been a shift toward finer yarns for some time now, distributors state that this trend to "try something new" has been more pronounced in recent weeks.

While there has been a great deal of talk about the re-conversion period, some seasoned yarn dealers state that transition in textiles is still in progress and only now showing up with some customers who seek different kinds of yarn for new production on which they hope to concentrate for the long pull.

Yarn men observe that some yarn users are shifting from carded to combed yarns, combed to mercerized and even ungassed mercerized to gassed mercerized.

Distributors state that never before have they seen buyers stressing quality so much as today. And though customers are closely following yarn prices at present, many will not sacrifice quality for better prices, it has been found by many spinners.

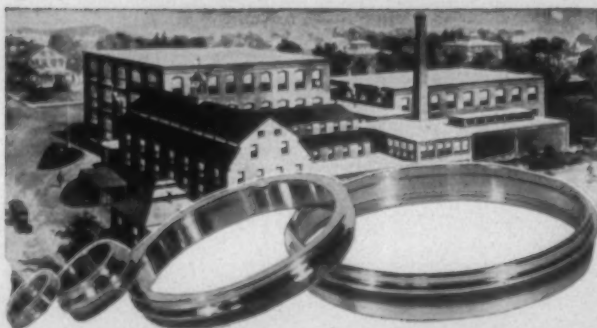
Hence, while it is granted that some buyers have been deferring placement of heavier yarn coverage because of uncertainty over the general price structure, veteran distributors believe some of the quiet on the selling front stems from customer testing with items manufactured from unfamiliar types and counts of cotton yarn.

A number of large accounts began pricing their fourth quarter yarn supplies immediately following release of the government cotton forecast. In some cases, necessity of providing for greater needs than were figured a month ago led to increased orders, it is stated. Houses that were open the day following the report handled many inquiries and it is reported some distributors closed considerable business. It was noted that a pick-up in inquiries occurred immediately after release of the government's crop estimate. In some cases, where spinners already booked new business enough to sustain operations ahead for several weeks, it is believed firm quotations for deliveries beyond Oct. 1 may be delayed.

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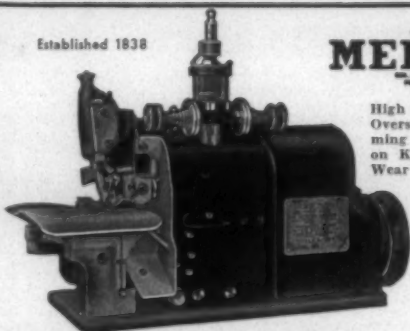
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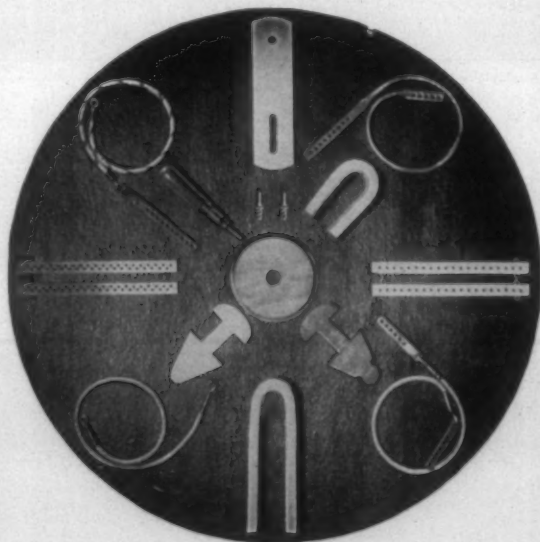
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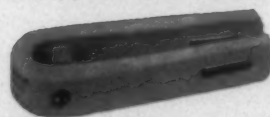
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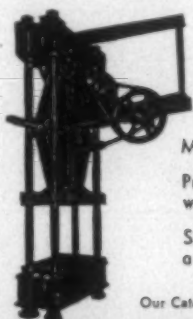
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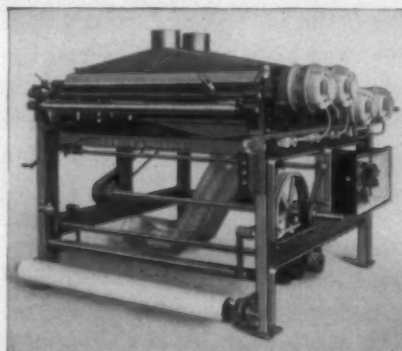
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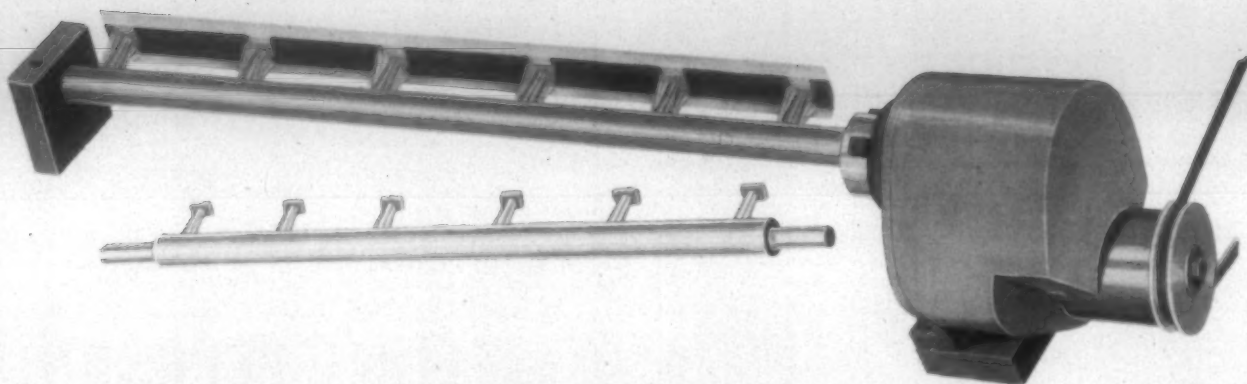
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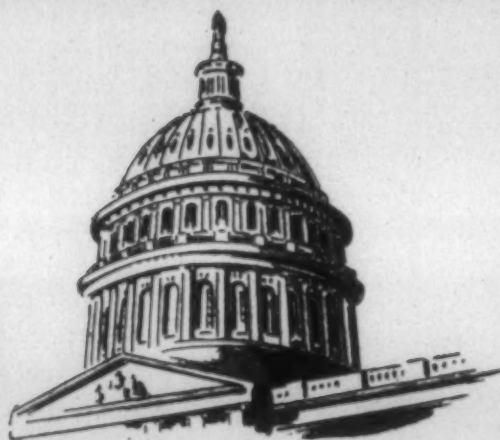
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# WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]



The broadest survey of management-employee relations in the nation's history—five-pointed and involving a close-up study of some of the country's largest industries and plants—is starting by the congressional joint committee set up in the Taft-Hartley Act. Its first report to Congress will be made March 15, but its work will continue until the end of 1948. Senator Ball (R., Minn.), is chairman, and Rep. Hartley (R., N. J.), is vice-chairman. Preliminary objectives call for delving into five specific areas of union activities and employer-employee contacts, but the scope will be greatly broadened in the latter months of this year.

Case field studies will be started at once by the committee and its staff. The studies will cover ten large concerns with "good" labor relations, and ten with "poor" labor relations, ranging over the last 20 years and measured in terms of the number and extent of work stoppages, strikes and labor disputes. This major quest is expected to develop basic information on principles and procedures in collective bargaining and employer-employee relationships that have proved most successful. In addition, the effect on labor relations of welfare funds, profit sharing plans, annual wage and incentive systems, and other welfare undertakings, will be observed.

Operation of the new labor law, with a view to promptly recommending any changes that are deemed necessary or desirable, will be carefully observed and studied by the committee in co-operation with N. L. R. B. and other affected agencies of government. This study will cover controlling features of the new law, as well as provisions of the Wagner Act remaining in effect, with consideration of suggested changes and additions.

Procedures in industry-wide bargaining, with wage agreements in effect and their influence on the national economy, as a segment of the committee's study, will be observed in four or more major industries, chosen from coal, steel, glass making, textiles and garments, maritime shipping, meat packing, automobiles, steel and foundries, and trucking. The history and types of wage agreements, with procedures followed, and effects in each particular industry, and upon pro-

ductive and consuming activity, will be scrutinized. Committee hearings will follow, at which representative witnesses will appear.

Welfare funds and retirement systems, as far as they have been developed, have a place in the committee's over-all study. Attention is to be given to the relation of such funds, and their benefits, to the Social Security system, and the extent to which improved integration may be possible.

Union constitutions and by-laws, and the internal organization and government of labor unions and of employer associations are in the committee's five-point program for study, and carried on in co-operation with the Bureau of Labor Statistics and the Department of Commerce. The committee will find out, too, how employer associations are organized, and the part they exert in labor relations.

The survey will be accompanied by frequent reports, intended to provide a stable foundation on which the workings of the new law can be charted, and desirable changes defined. The committee will study violations of the law as well, and of subterfuges used to evade or nullify its provisions, as well as the manner in which it is administered by N. L. R. B.

Congress is expected to go very slow in amending the labor law. It may await clear-cut decisions by the courts on features that are proving controversial, or over which unions are making loudest protests. Especially is this true of the provisions laying restriction on political spending by corporations and unions, and on indiscriminate use of union dues and funds in campaigns and elections.

First provision of the law probably to undergo a legal test is the ban on breach of contract. The law's aim is to protect both employers and workers who want to work against wildcat strikes and work stoppages called by irresponsible leaders. At the same time the courts will probably have to decide the validity of wage pacts, such as the Lewis coal agreement, deliberately designed to evade the law's punitive provisions against wildcat strikes. Employers signing such agreements may be called on to show that they have not, in



effect, engaged in a conspiracy to evade or destroy the law's safeguards for the benefit of industry in general and the country at large.

**Terms of the law are met,** it is claimed, when union spokesmen agree not to encourage, or condone, or take part, in wildcat strikes, and concede full liberty to the employer to discipline workers who engage in them. In so defining the limits of union responsibility, and in detaching the union from illegal acts of its members, the provisions of the law possibly may be met without laying the union open to the payment of damages for illegal acts of members beyond the power of its officials to control. This procedure is claimed to be the only safe method for a union to raise a safeguard against liability for damages.

**Serious question as to the legality of an employer agreeing in a wage contract not to avail himself of the provision to sue for damages is raised** by members of both the House and the Senate labor committees. At least the risk is incurred of N. L. R. B. holding both the employer and the union to be guilty of unfair labor practices, which would open the way for employees injured in an outlaw strike to sue both employer and union for damages in that they had conspired to abrogate the law. It is pointed out there is no lawful way in which individuals can conspire to evade obligations of a Federal statute.

**First strike damage suit against a union under the law** was filed by the Globe Co., of Chicago, for \$75,000, and for \$30,000 additional for each week the strike continues, against 525 C. I. O. steel worker unionists. The union is charged with violating its contract by calling a strike. The contract bars lock-outs, strikes, shut-downs and other interferences. The union struck for a pay increase of 12½ cents after the company had offered 7½ cents.

**The motor industry is expected to be the area in which the new law will soon come to some determinative tests.** The Ford plant is an early battleground, with differences allegedly centering on a pension plan, and union demand for a "no-penalty" clause in the wage contract. Back of the dispute, however, is the Ford action in firing foremen who had engaged in a long strike, and were held to have been involved in violence.

**N. L. R. B. is being transformed to meet terms of the new law.** The act provides it shall not operate retroactively to cover a condition not an unfair labor practice under the Wagner Act, but where hearings have not begun on complaints, the cases are being re-examined. Complaints of employers will be accepted after Aug. 22. Contracts entered into between June 23 and Aug. 22 may not grant exemption from union shop provisions for more than one year from signing, or until expiration, which ever comes first.

**One in every three of the 140 N. L. R. B. elec-**

**tions in June to select employee bargaining agents rejected any union at all.** Independent unions won 54 per cent, C. I. O. 55 per cent and A. F. of L. 52 per cent, of the elections in which they took part. The number of elections deciding against any union at all has been on the increase for a year; in June, 1946, the number of no-union outcomes was 18, and in June, 1947, it was 32.

**Unity negotiations between A. F. of L. and C. I. O. arising in their opposition to the labor law, have broken down.** Philip Murray in a bitter letter to William Green says it has now "become apparent that the objective of the executive council of A. F. of L. is to prevent members of organized labor from effectuating their keen desire to establish immediate working unity to defeat the drive of reaction on both economic and political fronts." Murray condemns what he calls "insistence on organic unity as a prerequisite to co-operative action."

**C. I. O. will exert an effort in 1948 to defeat legislators who voted for the new labor law, says Murray.** C. I. O.'s P. A. C. is already at work to get out the vote, "particularly in heavily concentrated industrial areas," he says, to combat "the trend toward special privilege that dominates Congress." Murray called the law the "greatest ham-stringing act for labor in the country's history."

**Chairman Hartley, of the House Labor Committee, says "labor racketeers" are spreading the report he will not seek re-election** because of fear that "my strong advocacy of the new labor law will result in defeat." He announced in last year's campaign he would not seek re-election next year in order to return to private business. He had bitter opposition of A. F. of L. and C. I. O. in the last three campaigns, and said: "I trounced this opposition in all three campaigns, and could do it again if I chose, but I'm standing on my decision to retire."

**Workers who are "slow," or whose productivity is low, will suffer most under the higher minimum wage of 65 cents that is being demanded by union leaders,** in the opinion of many members of Congress. In industries where substantial wage increases have been granted that included a sharp rise in the minimum wage, readjustments have taken place which have frequently removed, and thrown into idleness, the workers whose productivity was deemed lower than warranted by the minimum wage rate.

**Steel prices rising by \$5 to \$10 a ton after the Lewis coal pact can be passed on without threat of buyers' resistance at the retail level,** say steel producing officials. The relation of these increases to the wage pact is due for careful scrutiny by the congressional joint committee. One of the first hearings will call in steel officials to give their explanation. Big Steel has a five months' back-log of orders on hand.





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